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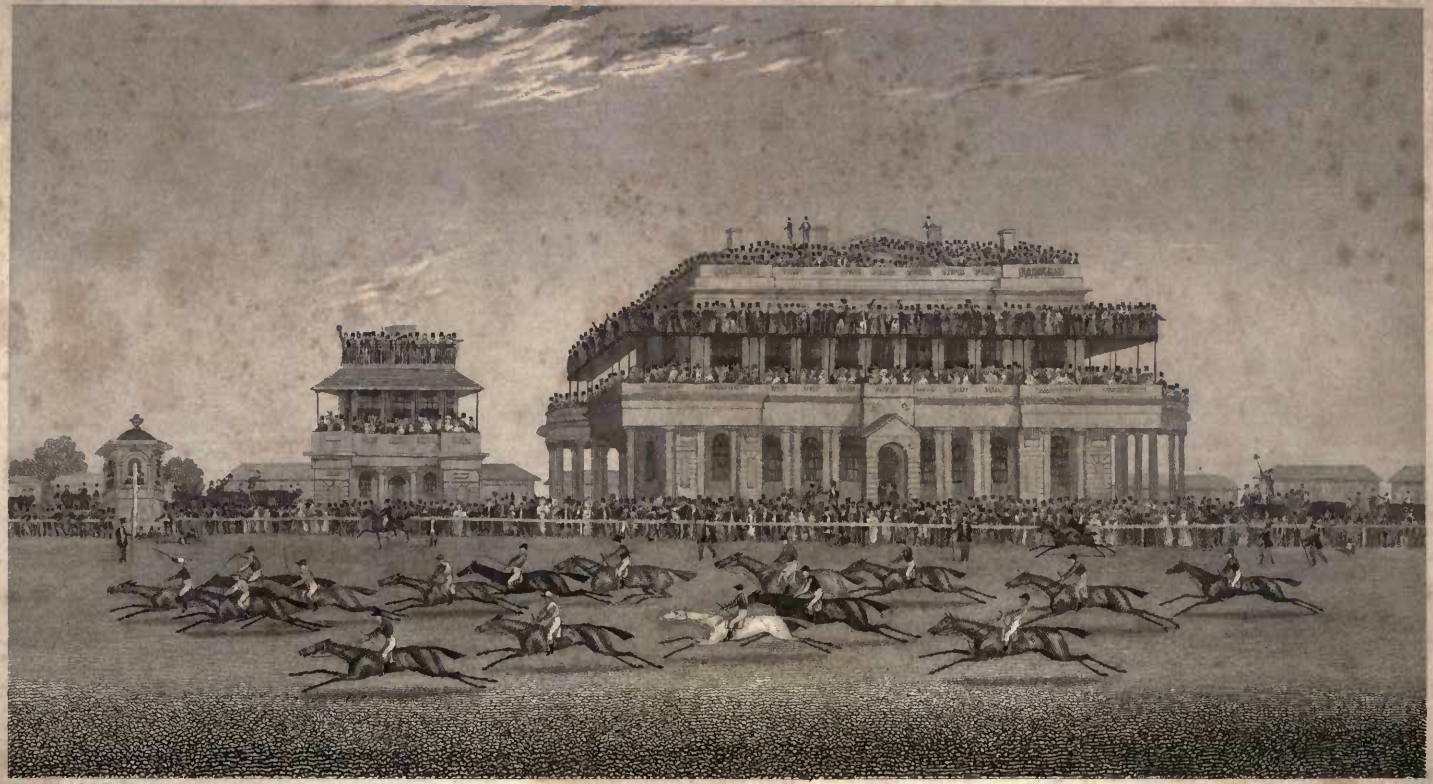
W. C. Macready
Theatre R.
Drury Lane

THE FIELD BOOK.



Drawn by J. Pollard. Engraved by H. A. Cox.

DONCASTER RACE FOR THE GREAT ST LEGER STAKES, 1832.

THE

FIELD BOOK:

OR,

SPORTS AND PASTIMES

OF THE

United Kingdom;

COMPILED FROM THE BEST AUTHORITIES,

ANCIENT AND MODERN.

BY

THE AUTHOR OF "WILD SPORTS OF THE WEST."

"The sylvan youth,
Whose fervent blood boils into vehemence,
Must have the chace."—THOMSON.

"What is a gentleman without his recreations?"—OLD PLAY.

LONDON:
PUBLISHED BY EFFINGHAM WILSON,
ROYAL EXCHANGE.

1833.

LONDON :
PRINTED BY BRADBURY AND EVANS,
WHITEFRIARS.

INTRODUCTION.

In presenting the Field Book to the Sporting World, some explanation respecting the motives that led to its publication, are deemed necessary.

An enthusiastic admirer of rural sports from boyhood, the Compiler sought with avidity after any book connected with his favourite recreations, from which either amusement or information might be obtained. The older authors, with the exception of a few pages of quaint and curious anecdote, were generally formed of barbarous theories, whose absurdities had long since caused them to be disregarded. The more modern, whether confined to a particular subject, or professing to be repertories of British Sports, were too frequently overloaded with hackneyed and unimportant matter, and merely reprints of treatises for years before the public, and differing from their predecessors in nothing but the name.

But had there been nothing objectionable in the execution of sporting works, as they appeared during the last century, the total change in everything connected with the British field, would render them now of little value, but to point a contrast between the past and present systems. Without reverting to the times when jockeys rode in tie-wigs, and men would not venture to a trout-stream unless furnished with a velvet cap; when country gentlemen

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deserted their ladye-loves ere cock-crow, to see the sun rise above a fox-cover; when no pond-fish could resist a bait prepared with a dead-man's finger; and a sucking-mastiff, stuffed with snails and judiciously roasted, was a sovereign remedy for a shoulder-slip;—without reverting to these times, what changes have not occurred within our own recollections? The mystic arcana of old professors have vanished before practical and scientific improvement, and the Sporting World has undergone a total revolution, and produced a new order of men and things.

While, however, expressing these convictions, the Compiler would not undervalue many of the useful and intelligent writers and collectors who have preceded him. With allowances for their times, and the false theories then received, which modern science has exploded, where will more information be found than in the "Rural Sports," "Thoughts on Hunting," "Essay on Sporting," and other contemporaneous works? It is of the copyists of these writers that the Compiler would complain, who, adopting everything, good and bad, from these originals, without a single addition of their own, have dosed the public ad nauseam, re-vending the same wares again and again, without even the redeeming grace of acknowledging the sources of their spoliations.

To produce a short and lucid compendium of all matters connected with the field, and which might be considered interesting to the sportsman, has been the object of the present compilation. All that appeared valuable in the old school, as far as was compatible with the progress of modern science, has been retained; while in established improvements, the more recent systems have only been attended to. Where, however, ancient and modern principles were opposed, and the point at issue was doubtful or consequential, authorities in support of the conflicting theories are quoted, and the reader can use a discretionary power in his adoption.

To convey simple information and avoid scientific display, has been the Compiler's wish; and the plainest of the received authorities have accordingly been preferred. Hence, White of Exeter,

and Bewick, have been principally followed in the veterinary and ornithological departments; while the more erudite pages of Blaine and Percivall, Cuvier, Montagu, and Rennie, have contributed much that was valuable. In canine descriptions and diseases, Brown and Blaine have been selected. On piscatory subjects Daniel forms the text-book, while Davy and modern *artistes* of the angle have not been overlooked. In sporting antiquities the Compiler has consulted Strutt; in falconry he has chosen Sebright. Upon the breeding and management of game, Moubray has been his Mentor. From Jesse and White of Selborne much that was curious in natural history and animal economy has been extracted. In the mechanical department he has received assistance from several leading gun-makers; and upon numerous subjects of general interest to the sportsman, in Colonel Hawker he acknowledges a *Magnus Apollo*. Finally, many anonymous works and writers, either not essentially sporting or of minor name, have been extensively quoted in the pages of the FIELD BOOK.

Having stated the principal sources from whence the compilation has been made, it may be observed that as it was an object to embrace British sports generally, considerable difficulty arose in compressing a necessary portion of information upon these varied pursuits, within the small compass of a single octavo. A second volume, or one of larger size, was objectionable; and although the smallest sized type consistent with comfort to the reader has been employed, it is feared that many a sin of omission will be laid at the Compiler's door. From the difficulty attendant on alphabetic arrangement, some articles also were omitted in their proper place, and must be sought for in the Appendix. All the compiler can say in apology is, that when the Field Book is found summary or imperfect, the necessity of compression must be recollected, and a reference to a competent authority will enable the reader to find all that he requires. The Compiler would here remark, that the books and authors mentioned above, will be found of infinite service in their respective departments; and many of them are indispensably necessary to him who would possess a well-appointed stable and a healthy kennel.

One subject introduced into the pages of the Field Book, might to some appear anomalous. Yacht-sailing has been slightly noticed; and had the limits of the work permitted, it should have held the prominent place to which it is so well entitled. While hill or forest bounds the sporting adventurers of other lands, the "deep, deep sea" is made subservient to the pastimes of Great Britain; and the flag, which in war bore "the battle and the breeze," in peace sweeps over the blue wave which owns its power, and would almost prove that the elements themselves cannot bound the sportive enterprise of the true-born Briton.

London, April 8, 1833.

THE FIELD BOOK;

OR,

SPORTS AND PASTIMES OF THE BRITISH ISLANDS.

ABDOMEN, *s.* A cavity commonly called the lower venter or belly.

Wounds of the Abdomen, or Belly, may occur to horses in leaping hedges, or pales, or be inflicted by the horns of a cow. Sometimes the tendinous covering of the belly is ruptured, while the skin remains entire; the gut then protrudes and forces out the skin into a tumour. This is a rupture of the belly, and is thought incurable. I have known one very large rupture cured by cutting out a piece of the skin which covered it, and then sewing up the wound and supporting it with a bandage. In some accidents the skin also is divided, with its peritonæal covering; the gut then comes out, and the wound is of a very dangerous nature, and still more so if the gut itself is wounded. The first thing to be done is to put the gut back, taking care to remove any dirt or other matter that may be sticking to it; for which purpose, should it be found necessary, it may be washed with warm water. If the gut cannot be returned, from its being full of air, the opening in the belly may be carefully enlarged to the necessary size. After the gut is returned, the skin *only* should be stitched up; and a cushion of several folds of old linen and tow being placed on the wound, should be kept in its situation by means of a wide bandage rolled round the body, and carefully secured. The animal should then be copiously bled, have his bowels emptied by clysters, and his food restricted to grass or bran mashes, and that in moderate quantity.

ABERDEVINE, *s.* (*Carduelis spinus*, CUVIER).

Size of the redpole, (*Fringilla linaria*,) or between that and the linnet. Length rather more than five inches; bill reddish-white, tipped with blackish brown; eyes, umber-brown; head, greenish black; over each eye a pale streak of dingy primrose-yellow; neck, back, wings, and tail, oil-green, paler, and more yellow, on the lower parts of the back towards the tail coverts. The feathers of the back and wings are streaked down the middle with a tint formed of blackish-green and hair-brown; sides of the head, throat, breast, and under parts, pale wax-yellow, inclining to sulphur-yellow; middle of the parts below the breast very pale wine yellow, passing into white; across each wing are two bands of primrose yellow, and between them one of black; part of the quills and tail edged with pale gamboge-yellow: legs and feet pale flesh-red. The head of the female is of a brownish-colour, inclining to grey where the male is black; cheeks and sides of the neck siskin green or oil green; and all the rest of her plumage is of a more dingy colour than in the male.

These birds are of so mild, gentle, and docile a disposition, that they become quite tame almost immediately after they are taken. They may be taught many pretty tricks, such as to open the door of their cage, draw up their food and water, and come to the hand to be fed at the sound of a little bell or a whistle. Their food is the same as that of canaries, and they are managed in the same manner.—*Montagu.*

Abscess, *s.* A morbid cavity in the body.

Absorbents, *s.* Medicines which neutralise the acid matter in the bowels or stomach. Potash, soda, magnesia, chalk, &c., are commonly employed.

Absterge, *v.* To cleanse by wiping.

Abstergent, *a.* Cleansing ; having a cleansing quality.

Acacia catechu, *s.* An extract from the inner wood of the acacia; a powerful tonic and astringent, and useful in diarrhœa and diabetes.

Accident, *s.* That which happens unforeseen; casualty, chance. (*Vide* Gun.)

Accipiter, *s.* A genus of the falcon family thus characterised. Bill short. Nostrils somewhat oval. Shanks elongated and smooth. Shins plated with scales, the sutures scarcely perceptible.—*Vigors.*

Acetate, *s.* The salt formed from a combination of acetic acid with alkalies or metallic oxides. Acetates are largely used in veterinary practice, as those of ammonia, lead, &c.

Acetate of Alumine (in dyeing)

Is prepared by pouring acetate of lead into a solution of alum, on which a double decomposition takes place; the sulphuric acid combines with the lead, and the sulphate of lead precipitates in the form of an insoluble powder, while the alumine combines with the acetous acid, and remains in the liquor.

This mordant gives a richer colour than alum.

Lime is also sometimes employed as a mordant, but it does not answer so well in general, not giving so good a colour. It is used either in acetate of lime water, or as a sulphate of lime dissolved in water.

A solution of indigo in the sulphuric acid is used for dyeing wool. This is called the *Saxon blue*, and it gives a very beautiful colour.

To dye by the sulphate of indigo, dissolve one part of indigo in four parts of concentrated sulphuric acid; add to the solution one part of dry carbonate of potash, and dilute the whole with eight times its weight of water. Boil the wool for an hour in a solution of five parts of alum, and three of tartar, for every thirty-two parts of cloth. The wool is then to be put in a bath of sulphate of indigo, diluted according to the strength of shade required, and kept till it has acquired the desired colour. The use of the alum and tartar is not to act as mordants, but to facilitate the decomposition of the indigo; and the alkali is added to the sulphate for the same reason.

Acid, *a.* Sour, sharp.

Acids, *s.* In veterinary practice are divided into three classes, mineral, vegetable, and animal. *Mineral* are sulphuric, nitric, and muriatic. *Vegetable*, acetic (vinegar), and tartaric (cream of tartar). Muriatic acid is commonly called spirit of salt. Sulphuric, oil of vitriol.

Action, *s.* The accordance of the motions of the body with the words spoken. In *sporting parlance*, it is used to describe the movements of a horse.

Adder, *s.* A serpent, a viper, a poisonous reptile.

Adders or vipers are found in many parts of Europe; but the dry, stony, and in particular the chalky countries abound with them. These animals seldom grow to a greater length than two feet; though sometimes they are found above three. The ground colour of their bellies is a dirty yellow; that of the female is deeper. The whole length of the back is marked with a series of rhomboid black spots, touching each other at the points; the sides with triangular ones; the belly entirely black. It is chiefly distinguished from the common ringed snake by the colour, which in the latter is more beautifully mottled, as well as by the

head, which is thicker than the body; but particularly by the tail, which, in the viper, though it ends in a point, does not run tapering off to so great a length as in the other. When, therefore, other distinctions fail, the difference of the tail can be discerned at a single glance.

The adder differs from most other serpents in being much slower, as also in excluding its young completely formed, and bringing them forth alive. The kindness of Providence seems to be exerted not only in diminishing the speed, but also the fertility, of this dangerous creature.

The adder is capable of supporting very long abstinence, it being a well ascertained fact that some have been kept in a box six months without food; yet during the whole time their vivacity was not abated. They feed only a small part of the year, but never during their confinement; for if mice, their favourite diet, should at that time be thrown into their box, though they will kill, yet they will never eat them. When at liberty they remain torpid throughout the winter; yet, when confined, they have never been observed to take their annual repose.

They are usually taken with wooden tongs, by the end of the tail, which may be done without danger; for, while held in that position, they are unable to wind themselves up to hurt their enemy; yet, notwithstanding this precaution, the viper-catchers are often bitten by them; but, by the application of olive oil, the effect is safely obviated.

William Oliver, a viper-catcher, at Bath, was the first who discovered this admirable remedy. On the first of June, 1735, in the presence of a great number of persons, he suffered himself to be bit by an old black viper, brought by one of the company, upon the wrist, and joint of the thumb of the right hand, so that drops of blood came out of the wounds. Being willing to satisfy the company thoroughly, and trusting to the speedy effects of his remedy, which was nothing more than olive oil, he forbore to apply anything till he found himself exceedingly ill, and quite giddy; in about an hour and a quarter after the first of his being bit, a chafing dish of glowing charcoal was brought in, and his naked arm was held over it as near as he could bear, while his wife rubbed in the oil with her hand, turning his arm continually round, as if she would have roasted it over the coals; he said the poison soon abated, but the swelling did not diminish much. Most violent purgings and vomitings soon ensued; and his pulse became so low and so often interrupted, that it was thought proper to order him a repetition of cordial potions; he said he was not sensible of any great relief from these; but that a glass or two of olive oil, drank down, seemed to give him ease. Continuing in this dangerous condition, he was put to bed, where his arm was again bathed over a pan of charcoal, and rubbed with olive oil, heated in a ladle over the charcoal. From this last operation he declared that he found immediate ease, as though by some charm: he soon after fell into a profound sleep, and, after about nine hours' sound rest, awaked about six the next morning, and found himself very well.

* * *

In every quarter of the globe but Europe, dogs are exposed to the venomous attacks of snakes, whose bite is instantly mortal. The viper is the only animal of this kind in Britain capable of inflicting a wound attended with serious consequences, and to which dogs become exposed when hunting. In these cases, the bitten part swells enormously, and the animal expresses great distress and suffering: at length he becomes affected with torpor, or, in some cases, with convulsions, when death commonly ensues. But it is not often that these bites are fatal, particularly when proper means are resorted to for obviating the effects. These means consist in freely rubbing the bitten part with volatile alkali, or with the spirit of hartshorn mixed with oil; giving also seven, ten, or twelve drops of the volatile alkali, or otherwise forty drops to a large dog, of the spirit of hartshorn, in a teaspoonful or two of sweet oil, every hour, until the amendment is evident.

* * *

The venomous stings of hornets, wasps, and bees, may be relieved by applying the vegetable blue used to colour linen. Laudanum also, or vinegar, or brandy, will, either of them, often remove the pain and inflammation speedily.—*Buffon—Blaine.*

Adhesive, *a.* Sticking, tenacious.

Adhesive, or Sticking Plaster, is made with diachylon, a small portion of resin, and a still less of common turpentine—or with diachylon and galbanum. Sticking plaster is employed to keep the edges of a fresh wound together; but in horses, when the wound is extensive, this is done more effectually by suture, that is, by sewing up the wound.

AËRIE, *s.* A nest of hawks, or other birds of prey.

The following account of the robbery of an aërie is given by Mr. Bullock:—"On the 10th of June, 1812, they were seen in their aërie on the tremendous cliff called the West Craigs, in the Isle of Hoy, (one of the Orkneys,) the towering rocks of which rise to the perpendicular height of 1200 feet from the sea. About one third of the way down this awful abyss, a slender pointed rock projected from the cliff, like the pinnacle of a Gothic building: on the extremity of this is a hollow scarcely of a sufficient size for the purpose for which these birds had fixed on it, *i. e.*, a place of security for rearing their young; the situation was such as almost to defy the power of man to molest their habitation; yet, with the assistance of a short slender rope, made of twisted hogs' bristles, did the well-known adventurous climber, or rocksman, 'Woolly Tomson,' traverse the face of this frightful precipice, and, for a trifling remuneration, brought up the young birds.

"After a fatiguing scramble up the sides of the mountain, we arrived at the place from whence we could see the aërie beneath; the distance was so great that the young eagles appeared no larger than pigeons. After placing us in a secure situation on a projecting ledge of the rock, Tomson left us, carrying his rope in his hand, and disappeared for upwards of half an hour; when, to our great joy, we discovered him creeping on his hands and knees up the spiry fragment, on which lay the unfledged eaglets; when, knowing he was then in our sight, he knelt on the top, and looking towards us, waved his hat. At this time it was impossible to see the situation he was in without trembling for his safety; the slender point of the rock on which he knelt was at least 800 feet above the surges of the Atlantic, which, with unbroken violence, were foaming beneath him. Yet he deliberately took from his pocket a cord, and tying the wings of the young birds, who made some resistance with their bills and talons, he put them into a basket, and began to descend, and in a few minutes the overhanging masses of stone hid him from our view. The old birds were in sight during the transaction, and made no attempt to defend, but, soaring a quarter of a mile above, occasionally uttered a short shrill scream, very different from their usual barking noise. Had they attempted a rescue, the situation of the climber would have been extremely dangerous, as the slightest deviation or false step would have precipitated him into eternity, a misfortune that a few years since befel his brother on the same spot, when in his company.

"After waiting in a most painful state of suspense for near an hour, our climber suddenly made his appearance, and, laughing, presented his prize."

* * *

"In Doomsday Book a hawk's aërie is returned among the most valuable articles of property; which proves the high estimation these birds were held in at the commencement of the Norman conquest."—*Bullock—Strutt.*

ÆTHIOP'S-MINERAL, *s.* A medicine so called, from its dark colour, made of quicksilver and sulphur ground together in a marble mortar.

AGE, *s.*

Age of a Horse.—The age of a horse may be discovered by certain marks in the front teeth of the under jaw until he is eight years old, about which period they are generally worn out. An experienced person can, however, judge of a horse's age pretty nearly by the countenance and general appearance of the animal, as well as by the length of the teeth and form of the tushes. Between the second and third year a colt begins to change his sucking or colt's teeth, as they are termed, for permanent teeth, which are larger, and of a different form and colour. The sucking teeth are small, and of a delicate white colour. When a colt is three years old, or between the second and third year, he changes his two front teeth, above and below; between the third and fourth year the two next are changed; and between the fourth and fifth year the two next, or corner teeth, are changed. About the end of the fourth year, or a little later, the tushes appear. Mares have seldom any tushes. At five years old the horse has a full mouth of permanent or horse teeth, and the corner teeth are those by which the age is ascertained after that period: they have a remarkable hollow or shell-like appearance when they first come up; but by the time the horse has completed his fifth year they have acquired some size, and look more like the other teeth. There is a cavity on their upper surface, at this period, of a dark or blackish colour. At six years old the cavity is much diminished, and at seven it is still less; at eight it has entirely disappeared, or if any mark remain, it resembles rather the eye of a bean. The tushes at five years old have two concavities withinside them, converging upwards, and terminating in the point of the tooth: at six, one of these concavities

is lost; that is, the one next the grinder: at seven, the other is diminished, but not quite gone: at eight, it is generally gone, but not always: afterwards the tush gradually gets more round and blunt. These are the changes by which the horse's age is usually determined; but they are subject to variations, and the only certain method of ascertaining the age, after six, is by a reference to the breeder. The length of the teeth is no criterion whatever; nor can the countenance be depended upon until the horse becomes very old and grey. The marks in the upper teeth have been thought to indicate the age: the marks in the two front teeth disappearing at eight, in the two next at ten, and in the corner teeth at twelve.

* * *

The general signs of age, unconnected with the animal's teeth, are easily distinguishable. The head grows lean and fine; the features look more striking; the hollows over the eyes deeper; the eyes themselves grow irritable, and twinkle; the cheeks become lank; the gums and soft palate pale and shrunk; the sub-maxiliary space is capacious; and grey hairs make their appearance in various places, more particularly over the eyes and about the face. In regard to the body generally, it also makes a more striking display of its shapes, than in any former part of life; the neck grows thin and fine; the withers grow sharp, and give an appearance of increased length and obliquity to the shoulder; the back, sinks; the quarters assume a more blood-like turn, and seem to lengthen; tumors of all kinds, spavins, splents, windgalls, &c. generally become in part or wholly absorbed; the legs feel sinewy and free from puff, though they may evince instability and weakness. Now-a-days it is not often that we meet with horses thus advanced in years; still more rarely with any that have grown decrepit from age.

* * *

The horse, if properly treated, will live to a great age. The best time of his life is considered to be betwixt that of five and ten years, although there have been instances where he has proved highly serviceable until twenty years; and it is on record, that some horses have wrought till upwards of thirty years old. Mares are said to be aged at seven years old, and horses at eight.

* * *

The Age of Dogs.—These animals do not, like horses and cattle, present any exact criterion of their age; nevertheless, attention to the following appearances will assist us in determining the matter. At about four years, the front teeth lose their points, and each of them presents a flattened surface, which increases as the age advances; they likewise lose their whiteness. In dogs fed much on bones, and in those who "*fetch and carry*," these teeth suffer very much, and are sometimes broken out while the dog is yet young. The holders, or tusks, are also blunted by the same causes. At seven or eight, the hair about the eyes becomes slightly grey. Gradually, likewise, a greyish tint extends over the face; but it is not till ten, eleven, or twelve years, that the eyes lose their lustre: when they become dim, general decay proceeds rapidly, though the life of some dogs is extended to fifteen, sixteen, or seventeen years; and I have seen a mother and son vigorous at twenty and twenty-one years old. Although such instances as the latter must be considered as rare, yet even these have been exceeded, if I might depend on my authority; for I once saw a small French dog, which I was assured had reached his twenty-fourth year, and which, at the time I saw him, was still vigorous and lively. I am not aware that much difference exists between the various breeds, as to the age they arrive at: spaniels, however, I have observed, are usually long lived; while terriers, on the contrary, I have seldom observed very old. The usual life of the dog may be considered as ranging between twelve and fifteen years: domestication has tended, in some degree, to curtail the period, but not so much as might have been expected, considering the powerful operation of artificial habits. —*White—Percival—Brown—Blaine.*

AGED, *a.* Old, stricken in years. When horses pass that period of life when their age is not discoverable by the teeth marks, they are commonly termed *aged.*

AGISTOR, *s.* Anciently an officer who attended upon the king's woods and forest lands, to receive and take in cattle, &c. by agistment; that is to depasture within the forest, or to feed upon the pannage, &c. This officer was constituted by letters patent.

AIM, *v.* To endeavour to strike with a missile weapon.

AIM, *s.* The direction of a missile weapon; the point to which the thing thrown is directed.

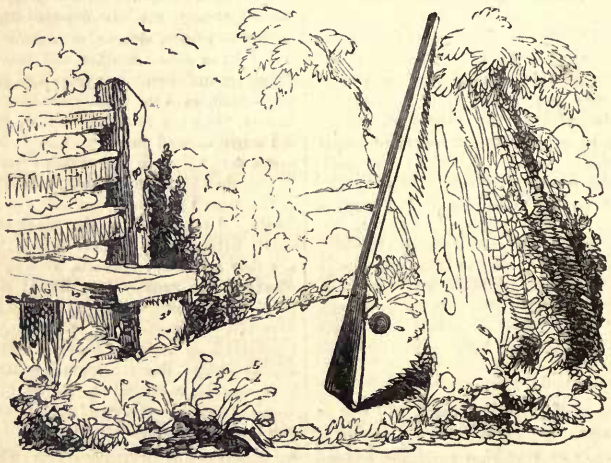
AIR, *v.* To expose to the air; to take the air; to warm by the fire.

AIR-BLADDER, *s.* A bladder filled with air, and used in lake fishing to buoy the ends of night lines and mesh nets.

AIR-CELLS OF BIRDS.

The lungs of birds have several openings, communicating with corresponding air-bags or cells, which fill the whole cavity of the body from the neck downwards, and into which the air passes and re-passes in the process of breathing. This is not all: the very bones of birds are hollowed out with the design of receiving air from the lungs, from which air-pipes are conveyed to the most solid parts of the body, and even into the quills and plumelets of the feathers, which are hollow or spongy for its reception. As all these hollow parts, as well as the cells, are only open on the side communicating with the lungs, the bird requires only to take in a full breath to fill and distend its whole body with air, which, in consequence of the considerable heat of its body, is rendered much lighter than the air of the atmosphere. By forcing this air out of the body again, the weight becomes so much increased, that birds of large size can dart down from great heights in the air with astonishing velocity. The structure of insects is not a little analogous.—*Ins. Trans.*

AIR-GUN, *s.* A species of gun charged with air instead of powder.



The *air-gun*, although long known, has never been much used, as its slight report is the only advantage it can possess over fire-arms, while its danger and inefficiency are admitted. Fatal accidents have occurred in charging it, and every attempt to remedy the danger has been unsuccessful. In the old principle, the globe or ball which forms the receiver has frequently blown up while the air was being pumped in, and loss of life or severe injury resulted. Latterly, the attention of several experimentalists has been directed to its improvement. One of them, Mr. Laing, of the Haymarket, imagined he had overcome the great objection; and by a very ingenious alteration, in which the globe was done away with, and the air-receiver transferred to the stock of the gun, he hoped thus to have removed the danger. But in this he was sadly disappointed. While trying the improved air-gun, the receiver burst, injured him severely, and induced him to abandon any farther experiments with this dangerous instrument.

Indeed, the manifest inferiority of the air-

gun to the rifle, would, independently of its danger, prevent it from coming into general use. As an instrument, it is extremely troublesome to shoot with, and liable to constant derangement. Its power is very weak, and in accuracy of aim the rifle is far superior. Even the advantage of slight report in the discharge is now comparatively done away with, in consequence of the recent introduction of the small-bore rifles for rook and rabbit shooting; which, from the trifling quantity of powder used in charging, are scarcely louder than the air-gun.

Purday, whose reputation as a rifle maker is deservedly high, has brought them to great perfection; and some beautiful guns of this description may be seen at his manufactory, which, though so small in the gage as to require bullets eighty to the pound, are perfect alike in execution and workmanship.

With respect to the *Air-cane*, though a more recent invention, it is only necessary to say, that it has all the disadvantages of the air-gun, with much weaker power, and a greater liability to get out of order. It is a mere toy, and, certainly, a very dangerous one.

* * *

Formerly, poachers were in the habit of using air-guns to destroy pheasants in the preserves. The instrument made no noise, and the operator preferred the boisterous, rainy night, when the moon was nearly at the full; the wet did not in the least affect the discharge of this implement, and the keepers knew a common gun could not be effectually employed in such tempestuous weather; besides, the report caused immediate alarm, and frequent detection. Vast numbers of pheasants were carried off, before this practice was discovered.

The late Mr. Tyssen was partial to an air-gun for shooting rooks, rabbits, &c., and was using one at Donyland Park, in Essex, when the screw of the valve gave way, as the servant was pumping the air into it; the copper ball fortunately took such a direction, that no one was hurt; but, in passing through the trees, it cut off some considerable branches. This accident staggered his confidence in the security of their principle, and from the best informed persons he consulted upon the subject, he was convinced there was no certainty of their being safe, and he wisely relinquished the air-gun, with all its asserted superlative properties.—*Daniel.*

Airy, *a.* Composed of air; relating to the air; high in air; light as air; gay, sprightly, full of mirth, lively.

Alcohol, *s.* A highly rectified spirit of wine.

Alkali, *s.* Any substance which combines with an acid, and produces a salt.

Alkalies form one of the classes of saline bodies, and are of three kinds: the *vegetable alkali* — kali, or potash,—the *mineral alkali* — soda, or natron, — and the *volatile alkali*, or ammonia. *Alkalies* are distinguished by their changing blue vegetable colours to a green, and yellow to orange; by combining rapidly with acids, and forming with them neutral salts — and by rendering oils miscible with water. *Vegetable* and *mineral alkalies*, not being evaporable, except in a high degree of heat, are termed *fixed:* and *ammonia*, being evaporable in a low temperature, obtains the name of *volatile alkali.*—*White.*

Alkaline, *a.* That which has the qualities of alkali.

Allspice, *s.* Jamaica pepper, a powerful cordial and carminative; the dose from two to three or four drachms. Mr. Bracey Clarke, in a book he has published on flatulent or spasmodic colic, or gripes, strongly recommends a tincture of allspice in proof spirit, as an effectual remedy for that disorder. The dose about 4 to 6 oz. in water.

Allure, *v.* To entice to any thing.

Aloes, *s.* A precious wood used in the east for perfumes, of which the best sort is of higher price than gold; a tree which grows in hot countries; a medicinal juice extracted from the common aloes tree.

Aloes is the inspissated juice of a plant of the same name, and is an effectual purgative for horses. It is intensely bitter, and strong and unpleasant to the smell.

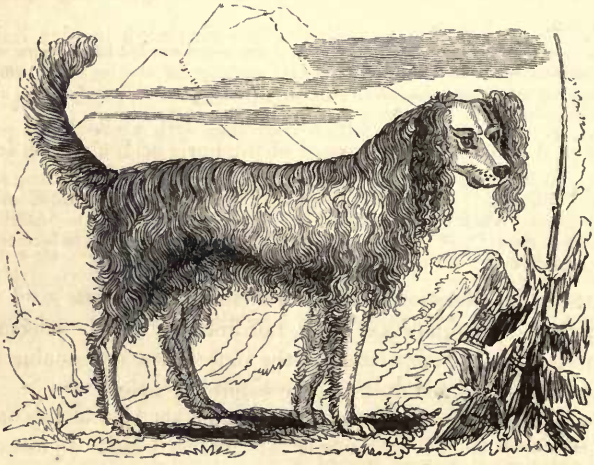
Socotrine aloes is grown in the island Socotra, and is safer in its operation than the other kinds. It is of a dark reddish or brown colour, opaque, and less disagreeable to smell than the others. It formerly sold at a high price, and was therefore liable to adulteration. Barbadoes aloes is a coarser medicine, liable to produce griping, and other unpleasant effects; but it is a safe and efficacious purgative. It is darker coloured, less brittle, and of a stronger and more disagreeable smell—more active than the Socotrine; and considered more certain in its operation. Every kind of aloes is liable to produce bad consequences if given too largely, or if the horse be treated improperly while under its effect. There is a peculiarity in the horse's intestines which renders them more liable to be injured by purgatives than those of other domestic animals, and therefore cathartic medicines should be prepared by persons of judgment and experience.

Cape aloes is rather transparent, very brittle, easily powdered, in this state of a bright yellow colour; the odour arising from it is not so strong as the Barbadoes, but stronger and less agreeable than the Socotrine. This kind is sold at a much lower price than the others, but is so weak and uncertain in its effect, that it is seldom employed in veterinary medicine. The dose of Socotrine aloes is from five to nine, Barbadoes from four to six, and Cape from six to ten drachms.

Aloes operates more speedily when united with soap, or any of the fixed alkalies. In old books cream of tartar is prescribed with aloes, under the supposition that it prevented griping, but soap is preferable.

Aloes is sometimes given as an alterative in doses of one or two drachms. It is also an ingredient in Friar's balsam, and compound tincture of myrrh; preparations much used by farriers.—*White.*

Alpine Spaniel (*Canis Alpinus*), *s.*



The spaniel of St. Bernard exceeds all others of the same tribe in size and beauty. He generally reaches two feet in height at the shoulders, and is upwards of five feet from the nose to the tip of the tail. His coat is much more curled than that of either the springer or the cocker, and his hair is very closely set, with short woolly fur at the roots; his feet like those of all the dogs of cold climates, are protected from the possibility of being cut by the frost, by being covered with a thick fur, which, besides, enables him to climb those almost inaccessible ridges of ice which are so numerous on the Great St. Bernard. There is a peculiarity about the corners of the eyes of this dog which is attributed to the snow, and the high Alpine regions which he inhabits.

In point of intelligence, the Alpine spaniel may be reckoned at least equal to any of the species; and he has the greatest aptitude for

learning anything to which he may be trained. He is peculiarly adapted to those stormy regions, the Swiss Alps; and Providence, in the wisdom of its arrangements, seems to have placed him where he was to be most serviceable to mankind.

These dogs are kept by the monks of the monasteries of the Swiss Alps for the express purpose of searching, during heavy snow storms, for travellers who may have fallen into cavities or pits, in which situation, without timely assistance, they would soon be starved or frozen to death. The practice is to send them out in pairs, and being perfectly conversant with the nature of their employment, they traverse a great extent of the adjoining country. By marks in the snow, but principally from the scent formed from the breath of persons so situated exhaling through the drift, they discover the pit that contains the buried traveller; in which case they instantly return and give the alarm, when assistance being procured, these sagacious animals lead the benevolent monks to the relief of the unfortunate individual.

* * *

The following anecdote appears to be well authenticated:—In crossing the mountain St. Gothard, near Airola, the Chevalier Gaspard de Brandenberg and his servant were buried by an avalanche; his dog, who escaped the heap of snow, did not quit the place where he had lost his master: this was fortunately not far from the convent; the animal howled, ran to the convent frequently, and then returned; struck by his perseverance, the next morning the people from the house followed him; he led them directly to the spot, scratched the snow, and after thirty-six hours passed beneath it, the Chevalier and his domestic were taken out safe, hearing distinctly, during their confinement, the howling of the dog, and the discourse of their deliverers. Sensible that to the sagacity and fondness of this creature he owed his life, the gentleman ordered by his will, that he should be represented on his tomb with his dog; and at Zug, in the church of St. Oswald, where he was buried in 1728, they still show the monument, and the effigy of the gentleman, with the dog lying at his feet.—*Brown—Daniel.*

Alteratives, *s.* Gentle medicines which act gradually upon the constitution.

Those commonly employed are nitre, antimony, sulphur, resin, and Æthiop's mineral, exhibited in combination. *Laxative Alteratives* are substituted for purgatives: *diuretic* are recommended for reducing or preventing swellings of the leg; and *diaphoretic* to increase insensible perspiration, and assist the coating of the horse.

Alum, *s.* A saline body, composed of sulphuric acid, alumine, and potash.

It is used internally as an astringent, in diarrhœa, diabates, &c., and externally as a remedy for grease. When burnt it is efficacious in cleansing ulcers, and for this purpose usually combined with red precipitate.

Alum is produced by placing a quantity of crude alum in an iron ladle, and keeping it over a slow fire until the watery particles are evaporated, and the mass becomes a light and pulverisable substance.

Aluminous, *a.* Relating to alum, or consisting of alum.

Amaurosis, *s.* A dimness of sight, not from any visible defect in the eye, but from some distemperature in the inner parts, occasioning the representations of flies and dust floating before the eyes.

In horses, this disease is caused by a pressure of blood upon the nerve of the eye; and in the earlier stages may be relieved by bleeding, but when of long standing it is incurable.

Amble, *v.* To move upon an amble, to pace; to move easily; to walk daintily.

Amble, *s.* An easy pace.

Ambler, *s.* A pacer.

Ambury, *s.* A bloody wart on a horse's body.

The removal of amburies, or warts, is commonly effected by a tight ligature of silk; but, in every case, no matter where the wart may be, the use of the knife is preferable. Some farriers touch them with arsenic, mixed with a little soft soap; but this is a dangerous method, and often produces a serious degree of inflammation and sloughing.

Farriers generally endeavour to get rid of wens by blistering, but this never answers; and sometimes they use arsenic and soap; but this is not only very dangerous, but generally ineffectual also. The knife is the safest, most expeditious, and most effectual remedy for wens, and every kind of encysted tumour. When a considerable artery is opened in cutting out a wen, the bleeding may be stopped by tying it, by means of a tenaculum or a crooked needle, or the bleeding vessel may be laid hold of by a pair of forceps and tied.

AMERICAN GAME, *s.*

The woodcocks are, in all respects, like those in England, except that they are only about three-fifths of the size. They breed here, and are in such numbers, that some men kill twenty brace or more in a day. Their haunts are in marshy places or woods. The shooting of them lasts from the 4th of July, till the hardish frosts come. Here are five months of this sort, and pheasants and partridges are shot from September to April.

The snipes are called English snipes, which they resemble in all respects, and are found in great abundance in the usual haunts of snipes.

The grouse is precisely like the Scotch grouse. There is only here and there a place where they are found; but they are, in those places, killed in vast quantities, in the fall of the year.

As to the wild ducks and other water-fowl, which are come at by lying in wait, and killed most frequently swimming or sitting, they are slaughtered in whole flocks. An American counts the cost of powder and shot. If he is deliberate in everything else, this habit will hardly forsake him in the act of shooting. When the sentimental flesh-eaters hear the report of his gun, they may begin to pull out their white handkerchiefs, for death follows the pull of his trigger, with perhaps even more certainty than it used to follow the lancet of Dr. Rush.

The plover is a fine bird, and is found in great numbers upon the plains and in the cultivated fields of the islands. Plovers are very shy and wary, but they have ingenious enemies to deal with. A waggon or carriage of some sort is made use of to approach them, and then they are easily killed.

Rabbits are very abundant in some places. They are killed by shooting, for all here is done with gun—no reliance is placed upon a dog.—*Cobbett.*

AMES-ACE, *s.* Two aces thrown at the same time on two dice.

AMMONIA, *s.* A volatile alkali, produced from bones or sal ammoniac, and other mineral substances. *Carbonate of ammonia*, a stimulant and cordial. *Drop ammoniac*, as an expectorant, is given successfully in doses of two, three, and four drachms.

AMPHIBIOUS, *a.* That which can live in two elements.

ANAS, *s.* The generic name of the duck tribe.

The Duck, a genus thus characterised. Bill middle size, strong, straight, more or less depressed, covered with a thin skin, often more raised than broad at the base, which is either furnished with a fleshy substance or quite smooth, always depressed towards the point, which is rounded, blunt, and clawed, margins of the two mandibles toothed with plates, of either a flat or a conical form. Nostrils almost at the surface of the bill, at some distance from the base, somewhat oval, half closed by the flat membrane which lines the nostril. Legs short, feathered to the knees, drawn back towards the belly; three toes before, wholly webbed; hind toe free, articulated higher up on the flank, without a membrane, or having only the rudiments thereof. Wings of middle size; the first quill either as long as the second or rather shorter.

Temminck divides the genus into four sections. 1. The Goose; 2. The Swan; 3. The Duck. A. Ducks having the hind claw naked. B. Ducks having the hind claw covered with a loose membrane.

This genus, in which ornithologists have included all the Swans, Geese, and Ducks, amounts, according to the latest enumeration, to ninety-eight species, and about fourteen varieties; thirty-three of the former, and one of the latter, are accounted British birds.

From the swan downward to the teal, they are all of a clean-plumaged, beautiful race of birds, and some of them exquisitely so. Those which have been reclaimed from a state of nature, and live dependent on man, are extremely useful to him; under his protection they breed in great abundance, and without requiring much of his time or care, lead their young to the pool almost as soon as they are

hatched, where they instantly, with instinctive perception, begin to search for their food, which at first consists chiefly of weeds, worms, and insects; these they sift, as it were, from the mud, and for that purpose their bills are admirably adapted. When they are further advanced in life, they pick up the sodden scattered grain of the farm-yard; which, but for their assiduous searchings, would be lost. To them also are allotted large quantities of corn which are shaken by the winds from the over-ripened ears in the field. On this clean and simple food they soon become fat, and their flesh is accounted delicious and nourishing.

In a wild state, birds of various kinds preserve their original plumage; but when tamed they soon begin to vary, and show the effects of domestication: this is the case with the tame goose and the duck, which differ as much from the wild of their respective kinds, as they do from each other.—*Bewick.*

ANASARCA, *s.* A general dropsy, consisting of a watery fluid lodged beneath the skin.

Anasarca arises from debility or inflammation. The former occurs to old horses when turned out into poor or marshy pasture, and is indicated by general swelling of the belly, chest, and hind legs; it generally ends fatally unless strong diuretics and sudorifics are employed; and these are combined in the celebrated old drench of Markham, which has cured more horses of this disorder than any other remedy; and is considered in the low country, about Glastonbury and Wedmoor, where this disease is prevalent, an infallible remedy. It consists of a decoction of wormwood in a gallon of ale, which is boiled down to two quarts, and skimmed. In this one ounce of Castile soap is dissolved, and then there is to be stirred in six drachms of grains of paradise, powdered, and the same quantity of long pepper. The whole of this mixture is given at once, fasting. The horse to be clothed and rode about until he sweats and stales profusely, which he soon does, and is then relieved. The horse is often capable of doing some work after his recovery; but the constitution of such horses is generally too far broken to receive any permanent benefit from this or any other treatment. The other kind of dropsy, or that which depends on a high degree of general inflammation, most commonly attacks colts during the first, second, or third year, or before they begin to change their grinding teeth. At this period there is less blood formed, not only from the state of the grinding teeth, the gums, and the mouth in general, which is such as to render mastication painful and imperfect, but from the stomach sympathising with this state of the mouth. This disorder in young colts is first observed by dulness, disinclination to motion, hanging the head, and indifference in grazing. There are swellings also on the belly, chest, sheath, or udder, which are sometimes very considerable. When these symptoms are observed, the colt should be taken up and bled until he is quite faint, or drops down from faintness. Nothing more is necessary, unless it is turning him into a place where he can have but little food and sufficient exercise. Markham's drench has been given to colts when affected with the Moor ill, as the disorder is termed, with success.

* * *

In dogs, this complaint very seldom occurs, unless as an accompaniment of the ascites. I have, however, now and then seen it, and, in most of the cases, it was in old dogs who had laboured under some previous debility. In such instances, when any remaining stamina affords a chance for recovery, the treatment recommended for dropsy of the belly may be resorted to: very small punctures may also be made in the distended skin.—*White—Blaine.*

ANGLE, *s.* An instrument to take fish, consisting of a rod, a line and a hook.

ANGLE, *v.* To fish with a rod and hook.

ANGLE-ROD, *s.* The stick to which the fisher's line and hook are hung.

ANGLER, *s.* He that fishes with an angle.

The Angler will take care, when he means to fish at bottom, to have with him different kind of lines neatly coiled up, strong single hairs, hooks untied of divers sorts, and also tied to bottom links of coarse and fine gimp of twisted and single silk worm gut, of hog's bristles, and of white and sorrel hair; likewise to be provided with cork and quill floats, and spare caps. Shot split, and small pistol bullets to poise the floats; shoemaker's wax in a piece of leather (if the wax be too stiff, temper it with tallow); silk of various sizes and

colours; recollecting, that hooks for worm fishing, and red paste, are usually tied on with scarlet; and those for gentles, yellow paste, and grubs with straw-coloured silk; a plummet to ascertain the depth of the water when a float is used; a clearing ring to disentangle the hook, which is used by running it along and over the top of the rod, and gradually down the line (holding it by a strong twine, long enough for any such purpose) to where the hook is fast, if at a stump or other immoveable substance; but if it be hung to weeds, let the ring get below the hook, then pull the twine, and the ring will break the weeds, and thus save both line and hook; in the former case, if it does not release the hook, it will enable the line to be broken near to it, and prevent the line from being strained in any other part. A sharp pen-knife, a pair of scissors, a small whetstone about two inches long and a quarter of an inch square, are indispensible. A landing-net, the iron hoop made with joints, and a socket to contain a handle for it; some use a light hook that screws into a long staff, which not only secures the taking of a large fish out of the water, but also is a useful implement in disengaging the line from weeds or boughs of trees. A disgorger to put down the throat of a fish when he has swallowed the hook, until it is touched, when by pulling the line gently at the same time that the instrument presses down the hook, it will be freed. These may be made of a piece of split cane five or six inches long, and a quarter of an inch wide, with a notch at each end. Baits should be carried, the gentles, pastes, and natural flies, in tin boxes; for the latter, with holes punched in the top to admit air. He will likewise not be without worms of different sorts in canvass and woollen bags, and a larger one for malt or other ground bait: to hold the baits, it is far better to have something like a fish-woman's apron, with three or four partitions (made as below), than to dangle the gentle-case or worm-bags from a button. A piece of coarse cloth, three quarters in length and breadth, doubled to within three inches at one side; which three inches must be doubled back again, and sewed all along close to the first doubling to receive a belt; the great doubling at each side is then to be sewed up, so that the foreside may allow room for the hand to go easily into the pockets, which will be ten inches deep; and when stitched in three places, will leave four divisions, each four inches broad. The fishbasket, pannier, or creel, as they are made very neat and light in wicker-work, should be large enough to admit the fish to lie at full length; they are thus better preserved, both in appearance and for use, than when bent and crushed together; some persons carry their pannier at their back, others under the left arm, having the side nearest them rather hollowed: in these baskets are sometimes a partition at the top, for holding night lines, &c.—*Daniel.*

Angling, *p.* The art of fishing with a rod and line.

Angling came into general repute in England about the period of the Reformation, when both the secular and regular clergy, being prohibited by the common law from the amusement of hunting, hawking, and fowling, directed their attention to this recreation. The invention of printing assisted in exciting attention to this subject, and made known its importance "to cause the helthe of your body, and specyally of your soul," as the first treatise quaintly concludes. Wynkin de Worde gave the world, in 1496, a small folio republication of the celebrated Book of St. Albans. It contained, for the first time, a curious tract, entitled the Treatyse of Fysshinge with an Angle; embellished with a wood cut of the angler. This treatise is imputed to Dame Juliana Berners, or Barnes, prioress of a nunnery near St. Albans. "The angler," she observes, "atte the least hath his holsom walke and mery at his ease, a swete ayre of the swete savoure of the meede flowers that makyth him hungary; he hereth the melodyous armony of the fowles, he seeth the yonge swannes, herons, duckes, cotes, and many other fowles, with their brodes, whych me seemyth better than alle the noyse of the houndys, the blast of hornys, and the scrye of fowles, that hunters, fawkeners, and fowlers, can make. And if angler take fysshe, surely thenne is there noo man merier than he is in his spyryte?" The Book of St. Albans contains "Treatises perteynynge to Hawkynge and Huntynge," as well as "Fysshinge with an Angle;" and several editions of it were printed in the sixteenth and seventeenth centuries; as that under the title of "The Gentleman's Academie in 1595;" "The Jewel for Gentrie in 1674." Mr. Haselwood, a learned biographer, has recently favoured the public with a well finished *fac-simile* reprint of the work, but he disputes the claim of the fair lady above mentioned to be the authoress of the above treatise on angling, and only assigns her a small portion of the treatise on hawking, the entire treatise on hunting, a list of the beasts of chase, and another of birds and fowls.

Walton's inimitable "Discourse on Angling" was first printed in 1653, in an elegant duodecimo, with plates of the most considerable fish cut in steel. This edition, and three

subsequent ones, consisted wholly of what is now called part the first of the "Complete Angler," or Walton's individual portion of the work. While engaged in 1676, being the eighty-third year of his age, in preparing the fifth edition, he received from his friend, Charles Cotton, Esq., a gentleman in Derbyshire, "Instructions how to angle for a Trout or Grayling in a clear Stream," as they were first called, which afterwards became part the second of this joint publication.

Angling has been thought of sufficient importance to be protected by statute. This first occurred in the reign of Edward I., when imprisonment and treble damages were awarded against all that should trespass on the rights of authorised fishers. By the 31 Hen. VIII. c. 2, s. 2, it was enacted, "If any evil disposed persons shall fish in the day time, from six in the morning to six in the evening, in any ponds, stews, or moats, with nets, hooks, or bait, against the will of the owners, they shall, on the conviction thereof, at the suit of the king, or the party aggrieved, suffer imprisonment for the space of three months, and find security for their good behaviour. By the 5 Eliz., c. 21, s. 2, it is enacted, "If any person shall unlawfully break or destroy any head or dam of a fish pond, or shall wrongfully fish therein, with intent to take or kill fish, he shall, on conviction at the assizes or sessions, at the suit of the king or the party injured, be imprisoned three months and pay treble damages; and after the expiration of the said three months, shall find sureties for good behaviour for seven years to come.

By the 22 & 23 Car. II. c. 25, s. 7, it is enacted, "That if any person shall, at any time, use any casting net, drag net, shore net, or other net whatsoever; or any angle, hair, noose, troll, or spear; or shall lay any wears, pots, nets, fish-hooks, or other engines; or shall take any fish by any means whatsoever, in any river, stew, moat, pond, or other water, or shall be aiding thereunto, without the consent of the owner of the water, and be convicted thereof within one month after the offence committed, such offender shall give to the party injured such satisfaction as a justice shall appoint, not exceeding treble damages; and pay the overseers of the poor such sum, not exceeding 10s., as the justice shall think fit: in default of payment, the said penalties to be levied by distress; or the offender to be committed to the house of correction for a term not exceeding one month, unless he enter into a bond, with surety, in a sum not exceeding £10, never to offend in like manner." Justices are also authorised to destroy all such articles as before recited and adapted to the taking of fish, as may be found in the possession of offenders when taken. Persons aggrieved may appeal to the quarter sessions, whose judgment shall be final.

And by the 4 & 5 William and Mary it is enacted, "That no person (except makers and sellers of nets, owners of a river or fishery, authorised fishermen and their apprentices) shall keep any net, angle, leap, pike, or rather engine, for taking of fish. The proprietor of any river or fishery, or persons by them authorised, may seize, and keep to his own use, any engine which shall be found in the custody of any person fishing in any river or fishery, without the consent of the owner or occupier. And such owner, occupier, or person authorised by either, sanctioned by the consent of any justice, in the day time, may search the houses or other places of any unqualified person, who shall be suspected of having such nets, or other engines in his possession, and the same to seize and keep to their own use, or cut in pieces and destroy." Stealing fish in disguise is made felony of by the 9 Geo. I. c. 22. "If any person armed and disguised shall unlawfully steal, or take away, any fish out of any river or pond, (whether armed or not,) shall unlawfully and maliciously break down the head or mound of any fish pond, whereby the fish shall be lost and destroyed, or shall rescue any person in custody for any such offence, or procure any other to join him therein, he shall be guilty of felony without benefit of clergy." This (commonly called the Black Act) is made perpetual by 31 Geo. II. c. 42.

By the 5 Geo. III. c. 14, s. 1, it is enacted, "That if any person shall enter into any park or paddock enclosed, or into any garden, orchard, or yard, belonging to, or adjoining to, any dwelling-house, wherein shall be any river, pond, moat, or other water, and, by any means whatsoever, (without the consent of the owner,) steal, kill, or destroy, any fish, bred, kept, or preserved therein, or shall be assisting therein, or shall receive or buy any such fish, knowing them to be such, shall, upon conviction, be transported for seven years. Persons making confession of such offence, and giving evidence against an accomplice, who, in pursuance thereof, shall be convicted, will be entitled to a free pardon." And by the same act, section 3, it is provided, "That if any person shall take, kill, or destroy, or attempt to take, kill, or destroy, any fish in any river or stream, pool, pond, or any other water, (not being in any park or paddock enclosed, or in any garden, orchard, or yard, belonging or adjoining to a dwelling-house, but in any other enclosed ground, being private property,) such person being thereof convicted by confession, or the oath of one witness before a justice, shall forfeit five pounds

to the owner of the fishery of such river or other water; and in default thereof shall be committed to the house of correction for a time not exceeding six months."

By the 1 Eliz. c. 17, "All fishermen are forbidden to destroy the fry of fish, small salmon and trout, under a penalty of twenty shillings;" and by the 4 & 5 Anne, for the protection of salmon in the counties of Southampton and Wilts, no salmon shall be taken between the first of August and twelfth of November. Statutes of Geo. I. and II., forbid the same fish to be taken in the rivers Severn, Wye, Ware, Ouse, &c., under eighteen inches long.

It is held that when the lord of the manor has the soil on both sides of the river, as in the case of the Severn, the right of fishing goes with it; and he who intrudes thereon must prove his claim of a free fishery; but when the tide ebbs and flows, and the river is an arm of the sea, as in the case of the Thames, the right is presumed to be common, and he who claims a privilege must prove it.—*Ency. Lon.* (*Vide* Fish, Fishing, &c. &c.)

Animal, *s.* A living creature.

Animal, *a.* That belongs or relates to animals.

Animalcule, *s.* A small animal.

Aniseed, *s.* A stimulant and cordial, much used in veterinary practice. The essential oil is generally preferred.

Ankle, *s.* The joint which joins the foot to the leg.

Ankle-bone, *s.* The bone of the ankle.

Anodyne, *a.* That which has the power of mitigating pain.

Anodyne Ball.

No. 1.	Opium . .	from ½ dr. to 1 dr.
	Castile soap . .	2 dr. to 4 dr.
	Powdered ginger .	1 dr. to 2 dr.
	Powdered aniseed .	½ oz. to 1 oz.
	Oil of caraways .	½ dr.
	Syrup, enough to form a ball.	

Anodyne Draught, or Drench.

No. 2.	Tincture of opium	from ½ oz. to 1 oz.
	Spirit of nitrous ether	1 oz. to 2 oz.
	Essence of peppermint	1 to 2 dr.
	Water . . .	1 pint.

Anodyne Carminative Tincture.

No. 3.	Best Turkey opium .	1 oz.
	Cloves bruised . .	2 oz.
	Jamaica ginger bruised	3 oz.
	Old Cognac brandy .	1 quart.

Keep them together in a well-corked bottle three or four weeks, frequently shaking it. The dose two or three ounces in water.

The ball may be mixed with warm ale, if the form of a drench be preferred to that of a ball, and either of the receipts will be found a good remedy in flatulent or spasmodic colic.—*White.*

Anoint, *v. a.* To rub over with unctuous matter; to consecrate by unction.

Anser, *s.* The goose, a genus thus characterised. Bill shorter than the head, a little conical, as are the marginal denticulations. Neck of a middle length.

Ant, *s.* An emmet, a pismire.

An universal bustle and activity observed in anthills may be generally regarded as a sign of rain. The ants frequently appear all in motion together, and carry their eggs about from place to place.—*Foster.*

Anthelminthics, *s.* Medicines that destroy worms, or expel them from the intestines.

The mercurial purgatives are generally considered the most effectual anthelminthics. A variety of vegetables have been thought to possess this quality, but I believe without foundation; among these are box, rue, savin, and wormwood. Æthiop's mineral, antimony, sulphur, and tin, have also been considered as anthelminthics. I believe tin has not been fairly tried: and as it is an efficacious anthelminthic in dogs, it may probably be found useful in horses. Of all the mercurial preparations, calomel is by far the best for this purpose, and may be given with aloes, soap, and some aromatic oil, with a little ginger. Many prefer giving the calomel at night, and the purgative the following morning. Aloes

are a good anthelminthic. A saline substance was some time ago introduced from India, as a remedy for that species of worm termed *botts*. It seems to be composed of common salt and liver of sulphur, but it does not appear to deserve the high character that was given of it; though, like salt or brine, it may sometimes have been found an effectual anthelminthic.—*White.* (*Vide* WORMS.)

ANTHRAX, *s.* A scab or blotch which burns the skin.

ANTICOR, *s.* A preternatural swelling in a horse's breast, opposite his heart.

This is, I believe, an inflammatory disorder, and requires bleeding and opening medicines, with fomentations. It is said to happen frequently, and often end fatally, in France and Italy; but seldom in this country. It consists in a painful swelling of the breast and belly, sometimes ending in suppuration, sometimes in dropsy. After bleeding and opening medicine, give mild diuretics and grass.—*White.*

ANTIDOTE, *s.* A medicine given to obviate the effects of poisons.

ANTIMONIAL, *a.* Made of antimony.

ANTIMONY, *s.* A metal.

Preparations of antimony are extensively used in veterinary practice, generally in combination. In fevers it is particularly useful, and in a fluid preparation is recommended in foul ulcers of the feet, caukers, &c. &c.

ANTISEPTICS, *s.*

Antiseptics are medicines which prevent putridity, or remove it if begun. The most efficacious are bark and other bitters; opium, wine, ether, ammonia, and camphor.

Horses do not appear to be subject to those fevers which, in the human system, are termed putrid. In gangrene, or mortification of the external parts, antiseptic fomentations are employed, which are made by boiling wormwood, rue, and other bitter herbs in water.

ANTISPASMODIC, *a.* That which has the power of relieving the cramp.

ANTISPASMODICS, *s.*

Antispasmodics in veterinary practice possess the power of allaying inordinate or painful motions in the system, particularly those involuntary contractions in parts which are naturally subject to the command of the will.

Medical writers divide antispasmodics into two kinds, viz. stimulants and sedatives. To the former belong arsenic, preparations of copper, zinc, and iron; also, ammonia, ether, essential oils, &c. The latter comprehends opium, musk, camphor, and all the vegetable narcotics.

Medicines of the fœtid kind, such as galbanum, assafœtida, &c., have also an antispasmodic quality.

When spasm arises from irritation, sedatives are to be given; but when it depends merely on debility, tonics are evidently proper. The spasmodic complaints to which horses are liable, are locked jaw and spasmodic or flatulent colic, commonly named gripes, in which the most efficacious antispasmodic is opium; but it is generally joined with others, such as camphor, assafœtida, ether, oil of peppermint, juniper, caraways, or allspice, or other aromatics.

Spices and aromatic seeds, such as cinnamon, cloves, ginger, caraways, aniseed, &c., are often joined with opium, either in powder or infused with it in proof spirit, to form a tincture, and will be found a good antispasmodic in that form.

ANTLER, *s.* Branch of a stag's horn.

APERIENT, *a.* Gently purgative.

APEX, *s.* The tip or point.

APIARY, *s.* The place where bees are kept.

APOPLEXY, *s.* A sudden deprivation of all sensation.

APOSTUME, *s.* A hollow tumour filled with purulent matter.

APPARATUS, *s.* Those things which are provided for the accomplishment of any purpose. (*Vide* SHOOTING.)

APPLICATION, *s.* The act of applying any thing to another; the thing applied.

AQUA-FORTIS, *s.* Weak nitric acid.

AQUILINE, *a.* Resembling an eagle; when applied to the nose, hooked.

ARAB, *s.* or ARABIAN. A horse bred in Arabia.

The Arabian.—Of all the countries in the world where the horse runs wild, Arabia produces the most beautiful breed—the most generous, swift, and persevering. They are found, though not in great numbers, in the deserts of that country, and the natives use every stratagem to take them. Although they are active and beautiful, yet they are not so large as those bred up tame. They are of a brown colour, their mane and tail very short, and the hair black and tufted. Their swiftness is incredible; the attempt to pursue them in the usual manner of the chace, with dogs, would be entirely fruitless: such is the rapidity of their flight, that they are instantly out of view, and the dogs themselves give up the vain pursuit. The only method, therefore, of taking them is by traps hidden in the sand, which entangling their feet, the hunter at length comes up, and either kills them or carries them home alive. If the horse be young, he is considered among the Arabians as a very great delicacy, and they feast upon him while any part is found remaining; but if from his shape or vigour he promises to be serviceable in his more noble capacity, they take the usual methods of taming him by fatigue and hunger, and he soon becomes a useful domestic animal. But the horses thus caught, or trained in this manner, are at present very few; the value of Arabian horses all over the world has, in a great measure, thinned the deserts of the wild breed, and there are few to be found in those countries, except such as are tame.

The Arabian breed has been diffused into Barbary as well as Egypt, and into Persia also. Those from the former country are usually denominated "Barbs."

Let the Arab be ever so poor, he has horses: they usually ride on the mares, experience having taught them that they bear fatigue, hunger, and thirst, better than horses; they also are less vicious, more gentle, and will remain, left to themselves, in great numbers, for days together, without doing the least injury to each other. The Turks, on the contrary, do not like mares, and the Arabians sell them the horses which they do not keep for stallions.

The Arabs have no houses, but constantly live in tents, which serve them also for stables, so that the husband, the wife, and the children, lie promiscuously with the mare and foal. The little children are often seen upon the body or the neck of the mare, while these continue inoffensive and harmless, permitting them thus to play with and caress them without injury.

The Arabs never beat their horses; they treat them gently; they speak to them, and seem to hold a discourse; they use them as friends; they never attempt to increase their speed by the whip, nor spur them, but in cases of necessity;—however, when this happens they set off with amazing swiftness, they leap over obstacles with as much agility as a buck, and if the rider happens to fall, they are so manageable that they stand still in the midst of their most rapid career.

The Arabian horses are of a middle size, easy in their motions, and rather inclined to leanness than fat. They are regularly dressed every morning and evening, and with such care, that the smallest roughness is not left upon their skins. They wash the legs, the mane, and the tail; the two latter they never cut, and very seldom comb, lest they should thin the hair.

They give them nothing to eat during the day; they only give them to drink once or twice, and at sunset they hang a bag to their heads, in which there is about half a bushel of clean barley: they continue eating the whole night, and the bag is again taken away the next morning. They are turned out to pasture in the beginning of March, when the grass is pretty high. When the spring is past they take them again from pasture, and then they get neither grass nor hay during the rest of the year; barley is their only food, except now and then a little straw. The mane of the foal is always clipped when about a year or eighteen months old, in order to make it stronger and thicker; they begin to break them at two years old, or two years and a half at farthest; they never saddle or bridle them till at that age, and then they are always kept ready saddled at the door of the tent, from morning till sunset, in order to be prepared against any surprise. They at present seem sensible of the great advantage their horses are to the country; there is a law, therefore, that prohibits the exportation of the mares, and such stallions as are brought into England are generally purchased on the eastern shores of Africa, and come round to us by the Cape of Good Hope.

The Arabs preserve the pedigree of their horses with great care, and for several ages

back. They distinguish the races by different names, and divide them into three classes; the first is that of the nobles, the ancient breed, and unadulterated on either side; the second, that of the horses of the ancient race, but adulterated; and the third the common and inferior kind: the last they sell at a low price, but those of the first class, and even of the second, amongst which are found horses of equal value to the former, are sold extremely dear. They know, by long experience, the race of a horse by his appearance; they can tell the name, the surname, the colour, and the marks properly belonging to each. When the mare has produced the foal, witnesses are called, and an attestation signed, in which are described the marks of the foal, and the day noted when it was brought forth. These attestations increase the value of the horse, and are given to the person who buys him. The most ordinary mare of this race sells for five hundred crowns; there are many that sell for a thousand, and some of the very finest kinds for fourteen or fifteen hundred pounds.

* * *

Eighty or one hundred piastres are given for an ordinary horse, which is in general less valued than an ass or mule; but a horse of a well known Arabian breed will fetch any price. Abdallah, pacha of Damascus, had just given three thousand piastres for one. The history of a horse is frequently the topic of general conversation. When I was at Jerusalem, the feats of one of these steeds made a great noise. The Bedouin, to whom the animal, a mare, belonged, being pursued by the governor's guards, rushed with her from the top of the hills that overlooked Jericho. The mare scoured at full gallop an almost perpendicular declivity without stumbling, and left the soldiers lost in admiration and astonishment. The poor creature, however, dropped down dead on entering Jericho, and the Bedouin, who would not quit her, was taken weeping over the body of his companion. This mare has a brother in the desert, who is so famous, that the Arabs always know where he has been, where he is, what he is doing, and how he does. Ali Aga religiously showed me, in the mountains near Jericho, the footsteps of the mare that died in the attempt to save her master,—a Macedonian could not have beheld those of Bucephalus with greater respect.

* * *

The pure Arabians are somewhat smaller than our race horses, seldom exceeding fourteen hands two inches in height. Their heads are very beautiful, clean, and wide between the jaws; the forehead is broad and square; the face flat; the muzzle short and fine; the eyes prominent and brilliant; the ears small and handsome; the nostrils large and open; the skin of the head thin, through which may be distinctly traced the whole of the veins; the neck rather short than otherwise. The body may, as a whole, be considered too light, and the breast rather narrow; but behind the arms, the chest generally swells out greatly, leaving ample room for the lungs to play, and with great depth of ribs. The shoulder is superior to that of any other breed; the scapula, or shoulder-blade, inclines backwards nearly an angle of forty-five degrees; the withers are high and arched; the neck beautifully curved; the mane and tail long, thin, and flowing: the legs are fine, flat, and wiry, with the posteriors placed somewhat oblique, which has led some to suppose that their strength was thereby lessened —but this is by no means the case; the bone is of uncommon density; and the prominent muscles of the fore arms and thigh, prove that the Arabian horse is fully equal to all that has been said of its physical powers. The Arabian is never known, in a tropical climate, to be a roarer, or to have curbs, the shape, from the point of the hock to the fetlock, being very perfect. It is a remarkable fact, that the skin of all the light-coloured Arabians is pure black, or bluish black, which gives to white horses that beautiful silvery gray colour so prevalent among the coursers of noble blood. Bay and chestnut are also common, and considered good colours. It has been remarked in India, that no horse of a dark gray colour was ever known to be a winner on the turf. If an Arabian horse exceed fourteen and a half hands in height, the purity of his blood is always doubted in India. * * *

Speaking of the docile character of the Arab horse, the late Bishop of Calcutta writes: "My morning rides are very pleasant. My horse is a nice, quiet, good-tempered little Arab, who is so fearless, that he goes, without starting, close to an elephant, and so gentle and docile, that he eats bread out of my hand, and has almost as much attachment and coaxing ways as a dog. This seems the general character of the Arab horses, to judge from what I have seen in this country. It is not the fiery, dashing animal I had supposed, but with more rationality about him, and more apparent confidence in his rider, than the majority of English horses."—*Le Keux—Brown—Clarke—Heber.*

ARBALIST, *s.* A cross-bow.

ARCHER, *s.* He that shoots with a bow.

ARCHERY, *s.* The use of the bow; the act of shooting with the bow; the art of an archer.

Archery is the art or exercise of shooting with a bow and arrow.

In this island, archery was greatly encouraged in former times, and many statutes were made for the regulation thereof; whence the English archers became the best in Europe, and obtained many signal victories. The Artillery Company of London, though they have long disused the weapon, are the remains of the ancient bowmen or archers. Artillery (*artillerie*) is a French term, signifying archery; as the king's bowyer was in that language styled *artilhier du roy*. And from that nation the English seem to have learnt at least the use of the cross-bow. William the Conqueror had a considerable number of bowmen in his army, when no mention is made of such troops on the side of Harold. And it is supposed that these Norman archers shot with the arbalist, or cross-bow, in which formerly the arrow was placed in a groove, termed in French, a quarrel, and in English, a bolt. Of the time when shooting with the long-bow first began among the English, there appears no certain accounts. Their chronicles do not mention the use of archery till the death of Richard I.; who, in 1199, was killed by an arrow at the siege of Limoges, in Guienne, which Hemingford mentions to have issued from a cross-bow. After this, there appears no notice of archery for nearly one hundred and fifty years; when an order was issued by Edward III., in the fifteenth year of his reign, to the sheriffs of most of the English counties, for providing five hundred white bows, and five hundred bundles of arrows, for the then intended war against France. Similar orders were repeated in the following years, with this difference only, that the sheriff of Gloucestershire is directed to furnish five hundred painted bows, as well as the same number of white.

Philip de Comines acknowledges what our own writers assert, that the English archers excelled those of every other nation; and Sir John Fortescue says "the safety of the realme of England standyth upon archers." And hence the superior dexterity of their archers gave the English a great advantage over their capital enemies, the French and Scots.

* * *

The Normans used the bow as a military weapon; and, under their government, the practice of archery was not only much improved, but generally diffused throughout the kingdom.

In the ages of chivalry, the usage of the bow was considered as an essential part of the education of a young man who wished to make a figure in life.

The ladies also were fond of this amusement; and by a curious representation from

an original drawing in a manuscript of the fourteenth century, we see it practised by one who has shot at a deer, and wounded it with great adroitness; and in another previous engraving, the hunting equipments of the female archers, about the middle of the fifteenth century, are represented.

It was usual, when the ladies exercised the bow, for the beasts to be confined by large inclosures, surrounded by the hunters, and driven in succession from the covers to the stands, where the fair sportswomen were placed; so that they might readily shoot at them, without the trouble and fatigue of rousing and pursuing them. It is said of Margaret, the daughter of Henry VII., that when she was on her way towards Scotland, a hunting party was made for her amusement in Alnwick Park, where she killed a buck with an arrow. It is not specified whether the long-bow or the cross-bow was used by the princess upon this occasion: we are certain that the ladies occasionally shot with both; for when Queen Elizabeth visited Lord Montacute, at Cowdrey, in Sussex, on Monday, August 17th, 1591, "Her highness tooke horse, and rode into the park, at eight o'clock in the morning, where was a delicate bowre prepared, under the which were her highness' musicians placed; and a cross-bow, by a nymph, with a sweet song, was delivered into her hands, to shoote at the deere; about some thirty in number were put into a paddock, of which number she killed three or four, and the countess of Kildare one."

Roger Ascham, in his instructions to the archer, first of all recommends a graceful attitude. He should stand, says this writer, fairly, and upright with his body, his left foot at a convenient distance before his right; holding the bow by the middle, with his left arm stretched out, and with the three first fingers and the thumb of the right hand upon the lower part of the arrow affixed to the string of the bow. In the second place, a proper attention was to be paid to the nocking, that is, the application of the notch at the bottom of the arrow to the bow-string: we are told that the notch of the arrow should rest between the fore-finger and the middle finger of the right hand. Thirdly, our attention is directed to the proper manner of drawing the bow-string: in ancient times, says Ascham, the right hand was brought to the right pap; but at present it is elevated to the right ear, and the latter method he prefers to the former. The shaft of the arrow, below the feathers, ought to be rested upon the knuckle of the fore-finger of the left hand; the arrow was to be drawn to the head, and not held too long in that situation, but neatly and smartly discharged, without any hanging upon the string. Among the requisites necessary to constitute a good archer, are a clear sight, steadily directed to the mark, and proper judgment to determine the distance of the ground; he ought also to know how to take the advantage of a side-wind, and to be well acquainted with what compass his arrows would require in their flight: courage is also an indispensable requisite, for whoever, says our author, shoots with the least trepidation, he is sure to shoot badly. One great fault in particular he complains of, which young archers generally fall into, and that is, the direction of the eye to the end of the arrow, rather than to the mark; to obviate this evil habit, he advises such as were so accustomed, to shoot in the dark, by night, at lights set up at a proper distance for that purpose. He then concludes with observing, that "bad tutorage" was rarely amended in grown-up persons; and therefore he held it essentially necessary that great attention should be paid to the teaching of an archer properly, while he was young; "for children," says he, "if sufficient pains are taken with them at the onset, may much more easily be taught to shoot well, than men," because the latter have frequently more trouble to unlearn their bad habits, than was primitively requisite to learn them good ones.

Kings and princes have been celebrated for their skill in archery, and among those of our own country may be placed King Henry VII., who in his youth was partial to this exercise, and therefore it is said of him in an old poem, written in praise of the Princess Elizabeth, afterwards Queen to Henry VII.

> See where he shoteth at the butts,
> And with hym are lordes three;
> He weareth a gowne of velvette blacke,
> And it is coted above the knee.

He also amused himself with the bow after he had obtained the crown, as we find from an account of his expenditures, where the following memorandums occur: "Lost to my Lord Morgan at buttes, six shillings and eightpence:" and again, "Paid to Sir Edward Boroughes thirteen shillings and fourpence which the kynge lost at buttes with his crossbowe." Both the sons of King Henry followed his example, and were excellent archers.

* * *

In a curious manuscript of the time of Queen Elizabeth, is this account of an archer and all his necessary appendages:—"Captains and officers should be skilful of that most noble weapon, and see that their soldiers, according to their draft and strength, have good bows, well notched, well strynged, and every strynge whippe in their noche; and in the myddes rubbed with wax, braser, and shooting glove; some spare strynges trymed as aforesaid; every man one shefe of arrows, with a

case of leather defensible against the rayne; and in the same fower and twentie arrows, whereof eight of them should be lighter than the residue; to gall or astonye the enemye with the hail-shot of light arrows, before they shall come within the danger of the harquebuss shot. Let every man have a brigandine or a little cote of plate, a skull or huskyn, a mawle of leade of five foote in lengthe, and a fusee, and the same hanging by his girdle with a hooke and a dagger; being thus furnished, teach them by musters to marche, shoote, and retire, keeping their faces upon the enemy's. Sum tyme put them into great nowmbers, as to battle appertayneth; and thus use them oftentimes practised, till they be perfecte; for those men in battel or skirmish cannot be spared. No other weapon maye compare with the same noble weapon."

* * *

The Royal Company of Scotland, one of the most ancient associations in the empire, is said to owe its origin to the commissioners who were originally appointed by James I., to superintend and regulate the exercise of archery throughout the kingdom. These commissioners, who were generally people of character and respectability, picked out among the number of men under their superintendence, the most expert archers; and, in cases of emergency, made a present of their services to the government, in order that they might form the king's body-guard. While in this situation, they gave repeated instances of their courage and dexterity. Within seven miles of Edinburgh, the royal company still claims the rank of the King's Chief Body Guards. In the year 1677, this company was known under the name and title of His Majesty's Company of Archers; and in the same year, and by the same act of the privy council, a piece of plate of the value of twenty pounds was shot for at the annual parades of the company, called Weapon-shawings; this plate was denominated the "King's Prize." At the period to which we are at present alluding, the Royal Company consisted of the principal nobility of Scotland. But the revolutionary principles to which they so tenaciously adhered, almost annihilated their consequence, and withheld the continuance of the King's prize. Their original magnificence was, however, revived on the accession of Queen Anne to the throne; but their attachment to the unfortunate and ill-fated house of Stuart, again proved the declension of their splendour. But these differences, by the annihilation of the family to whom they are attached, have now subsided, and they are now reinstated in all their former consequence. In 1788 the annual prize was revived and shot for, in the presence of a numerous body of spectators. We may here observe, that the three principal bodies of archers in England and Scotland, are now incorporated in one; by the union of the Woodmen of Arden, the Toxopholites, and the Royal Society of Archers. The prizes, which properly belong to the latter, and which are annually shot for, are, first, a silver arrow, which was presented by the town of Musselburgh, which seems to have been shot for as far back as the year 1603. Whoever gains this may take charge of it for a year; at the expiration of which period it is returned with any device that his imagination may suggest. Second, a silver arrow, which, in A. D. 1626, was granted by the town of Peebles. Third, a silver arrow, given by the town of Edinburgh, A. D. 1709. Fourth, a silver punch-bowl, about the value of fifty pounds, made at the expense of the company of Scotch silversmiths. Fifth, the king's prize, which is the entire property of the winner. These prizes are shot for at what is called rovers: the marks are placed at the distance of one hundred and eighty-five yards. The uniform of the Royal Company of Archers is tartan, lined with white, and trimmed with green and white fringes; a white sash with green tassels, and a blue bonnet with St. Andrew's feather and cross. They have also two standards; on one of which is inscribed, "Nemo me impune lacessit;" on the other, "Dulce pro patria periculum." — *Ascham — Strutt — Ency. Lon.*

ARCUBALISTER, *s. obs.* A cross-bow man.

ARM, *s.* The limb which reaches from the arm to the shoulder; the large bough of a tree; an inlet of water from the sea; in sporting parlance, that portion of the horse's fore-leg comprised between the shoulder and the knee.

AROMATIC, *a.* Spicy; fragrant, strong-scented.

AROMATICS, *s.* Spices; stimulants, as cinnamon, cloves, &c.

ARQUEBUSE, *s. obs.* A hand gun.

ARRACK, *s.* A spirituous liquor.

ARROW, *s.* The pointed weapon which is shot from a bow.

"There are three essential parts in the composition of the arrow," says Ascham, "the stele or wand, the feathers, and the head. The stele was not always made with the same species of wood, but varied as occasion required, to suit the different manners of shooting practised by the archers;" he commends sound ash for military arrows, and preferred it to asp, which in his day was generally used for arrows belonging to the army; but for pastime, he thought that none were better than those made of oak, hardbeam, or birch; "but after all," says he, "in this point I hold it best to trust to the recommendation of an honest fletcher." The feathers from the wing of a goose, and especially of a grey goose, he thought were preferable to any others for the pluming of an arrow.

English arrows then had forked heads and broad heads, but round pointed heads resembling a bodkin were reckoned better. The notch, or small hollow part at the bottom of the arrow, made for the reception of the bow-string, was varied as occasion required, or at the will of the archer, being sometimes deep and narrow, and sometimes broad and not deep.

* * *

An arrow, weighing from twenty to twenty-four pennyweights, made of yew, was considered by archers to be the best that could be made. The feathers of a goose should be used; and the bird from which they are taken should be two or three years of age. In an arrow, it is remarkable that two out of three feathers are commonly white, as they are plucked from the gander; but the third is usually brown or grey, being taken from the goose; and this difference of colour shows the archer when the arrow is properly placed. The expression of the "grey goose's wing," in the old ballad of Chevy Chase, is an allusion to this occurrence; originally, arrows were armed with flint or metal heads; latterly with iron of different forms and names. Henry IV. ordained that all arrows should be well boiled or brased, and hardened at the points with steel. Arrows were usually reckoned by sheaves; a sheaf consisting of twenty-four arrows. They were carried in a quiver, called an arrow case, which served for the magazine. In ancient times, different species of combustible materials were attached to the heads of arrows, and shot from long bows; and even subsequently to the invention of gunpowder this mode has been carried into execution. According to Neade, an archer may shoot an ounce of fireworks from an arrow twelve score yards. Among the stores at Berwick and Newhaven, in the reign of Edward VI., arrows with wildfire are enumerated. Some slight opinion of the strength of an arrow in its full flight, may be formed from the account given by Edward VI. in his journal: he observes, that one hundred archers shot arrows each before him, and afterwards altogether; that they shot at an inch board: some pierced it through and stuck in the other board, and others pierced it through with the heads of their arrows.—*Ascham—Strutt.*

ARSENICAL, *a.* Containing arsenic.

ARSENIC, *s.* A mineral, the preparations for which are sometimes used in veterinary practice.

There are two kinds, white and yellow: white arsenic is a powerful tonic, and has been given with success in glanders and farcy. Yellow arsenic, mixed with lard, is used to remove warts, and in fistula and poll-evil.

ARTERIAL, *a.* That which relates to the artery; that which is contained in the artery.

ARTERY, *s.* An artery is a conical vessel, conveying the blood from the heart to all parts of the body.

ARTICULAR, *a.* Belonging to the joints.

ASAFŒTIDA, *s.* A very offensive-smelling gum. It has antispasmodic qualities; and in veterinary practice is said to be serviceable in coughs, thick wind, and lock-jaw.

ASCARIDES, *s.* Little worms generally found in the rectum.

ASCITES, *s.* For this disease in horses and dogs, see *White, Blaine,* &c.—*Vide* ANASARCA.

ASH-COLOUR, *s.* A colour between brown and gray.

Ash colour, pearl colour, or golden cinnamon.—Take some *walnut* roots and boil till your stuff begins to strike, then add some *galls;* boil till it comes up near to what you want, and then add some copperas, but very sparingly.

ANOTHER METHOD.

Take a little fresh *black-thorn* bark and a few young tops of *briar;* boil them in water, and when you think all the dye is extracted, take them out, and put in a small bit of your stuff for trial, and, if you like the colour, put in the whole when boiling, and boil till it comes to your liking. *Bush-thorn* bark, when ground, if fresh, will, in turmeric, give a rich golden cinnamon.

ASH-COLOURED FALCON, *s.* This bird is smaller than the *Hen Harrier* or *Ringtail,* with which it is frequently confounded. It is a scarce bird, though Selby says he has taken it in Northumberland, where it breeds on the open moors. Pennant calls it a variety of the *Ringtail.*

ASININE, *a.* Belonging to an ass.

ASS, *s.* An animal of burden.

This animal, though now so common in all parts of these islands, was entirely lost among us during the reign of Queen Elizabeth, for Hollingshed informs us, that in his time "our lande did yield no asses." Yet we are not to suppose that so useful an animal was unknown here before that period; in fact, mention is made of them as early as the time of King Ethelred, above five hundred years preceding, and again in the reign of Henry III., so that it must have been owing to some accident that the race was extinct during the reign of Elizabeth. We are not certain as to the time it was again introduced, probably in the succeeding reign, when our intercourse with Spain was renewed, in which country this animal was greatly used.

Their constitution is so hardy, that even in the depth of winter, the most wretched hovel is sufficient for them from the cold; and so temperate are they with respect to food, that they can subsist on such vegetables as almost any other animal would refuse to eat. The thistle and plantain, which generally grow in abundance on waste lands and along the sides of roads, afford them a sufficient feast after their day of toil is concluded.

When young they are sprightly, handsome, light, and even graceful; but they soon lose those qualities, either from age or bad treatment, and become slow, stubborn, and headstrong. The ass is strongly attached to his master, notwithstanding he is usually ill-treated; he will scent him at a great distance, and distinguish him from any other person. Of all the animals covered with hair he is the least subject to vermin, which apparently proceeds from the peculiar hardness and dryness of the skin; and for the same reason he is less sensible than the horse to the whip, and to the stinging of flies.

The milk of the ass is the lightest of all milks, and is recommended by medical men to persons of delicate stomachs.

The age of the ass is equal to that of the horse, and even in some instances, exceeds it. One which died in 1782 had been employed in turning the water-wheel at a deep well in Carisbrook Castle for forty years.

By far the largest breed of asses at this time known in the world is in Spain; they are large, strong, elegant, and stately animals, often fifteen hands or more in height. The best of this breed sell there at very high prices, sometimes for as much as a hundred guineas each, and upwards. In other countries of Europe the ass is nearly as much neglected as it is in Great Britain. In Sardinia there is a race of asses that are very little larger than dogs; they seldom exceed two feet in height, and are in all respects proportionately small.

As the skin of the ass is very hard, and very elastic, it is used for different purposes, such as to make drums, shoes, and thick parchment for pocket-books, which latter is slightly varnished over. It is also of ass's skin that the orientals make their sagri, or, as we call it, shagreen. Probably, too, the bones of asses are harder than those of other animals, since the ancients made their best-sounding flutes of them. In proportion to his size, the ass can carry a greater weight than any other animal; he sleeps much less than the horse, and never lies down for that purpose, unless very much tired.—*Le Keux.*

ASTHMA, *s.* A frequent, difficult, and short respiration, joined with a hissing sound and a cough.

Asthma in Dogs.

The Canine Asthma is hardly ever observed to attack any but old dogs, or those who, by confinement, too full living, and want of exercise, may be supposed to have become diseased by these deviations from a state of nature. It is hardly possible to keep a dog very fat, for any great length of time, without bringing it on. This cough is frequently confounded with the cough that precedes and accompanies distemper; but it may be readily distinguished from this, by an attention to circumstances—as the age of the animal, its not affecting the general health, nor producing immediate emaciation, and its less readily giving way to medicine. The cure is often very difficult, because the disease has in general been long neglected before it is sufficiently noticed by the owners. As it is in general brought on by confinement, too much warmth, and over-feeding, so it is evident the cure must be begun by a steady persevering alteration in these particulars. The medicines most useful are alteratives, and of those, occasionally, emetics are the best. One grain of tartarised antimony (*i. e.* tartar emetic), with two, three, or four grains of calomel, is a very useful and valuable emetic. This dose is sufficient for a small dog, and may be repeated twice a week with great success—always with palliation.

* * *

It derives its origin from the artificial mode of life forced on pet and fancy dogs, whose close confinement and over-feeding lead to an extraordinary accumulation of fat: and according to the degree in which these predisposing causes have been applied, the disease appears earlier or later in life. In some it comes on at three or four years old: in others, rather less artificially treated, it may not appear until seven or eight.

In some cases, the irritation of the cough, and the accompanying hectic, emaciates and wears down the animal: in others, the pulmonary congestion stops respiration, and kills by a sudden suffocation; or the obstruction the blood meets with in its passage through the heart, occasions accumulation in the head, and convulsive fits are the precursors of death. Now and then a rupture of the heart, or of some large blood-vessel, suddenly destroys: but by far the most common termination of the complaint is in dropsy, or serous collections within the chest or belly, or both, but most frequently of the latter. In these cases, the limbs and external parts of the body waste, but the belly increases in its size; the legs also swell; the hair stares; the breathing becomes very laborious; and, in the end, suffocation ensues.

Of the various remedial plans I have pursued, none have appeared more uniformly beneficial than a course of emetics, steadily persisted in twice a week. In the intermediate days *alteratives* were administered, with the occasional use of a purgative, provided the dog was strong, fat, and plethoric; otherwise this was dispensed with: but it should be remembered, that this remedial plan must be uniformly and long continued, to ensure permanent benefit. The alterative is as follows:—

Calomel (*submuriate of mercury*) . . .	½ gr.
Nitre (*nitrate of potash*) .	5 gr.
Cream of tartar (*supertartrate of potash*) . .	10 gr.
Antimonial powder . .	2 gr.—Mix.

This may be given either as a powder, or it may be made into a ball with honey; this dose being repeated once or twice a day, according to the urgency of the case: the quantities may be also lessened or increased according to the effect produced; the recipe is intended for a dog of middling size. On the morning that the emetic is given, the alterative should be omitted; and where the alterative is repeated night and morning, it will be prudent to watch the mouth, that salivation may not unexpectedly come on. If this should happen, discontinue the medicine for some days. Where also the calomel has been found to disagree, I have substituted the following alterative with benefit:—

Nitre (*nitrate of potash*) .	2 gr.
Tartar emetic (*tartarised antimony* . .	½ gr.
Powdered Foxglove (*digitalis*)	½ gr.—Mix.

This may be given as the other, and alternated with the emetic also, watching the effect of the foxglove, through the medium of the pulse, that they may not be too violent. In some cases of long standing, where the attendant cough has been very harsh, noisy, and distressing, I have added ten, twenty, or thirty drops of tincture of opium (*laudanum*), or the eighth, sixth, or fourth part of a grain of opium, to each alterative with advantage. In other instances, the cough has been best allayed by an evening opiate of double the strength before prescribed. I have, now and then, experienced benefit also from the use of the balsamic gums, which may be all tried, therefore, in obstinate cases. Relief has been obtained likewise from the following, given every morning:—

Powdered squill . .	½ gr.
Gum ammoniacum, powdered .	5 gr.
Balsam Peru . . .	3 gr.
Benzoic acid . . .	1 gr.

Anisated balsam of sulphur to form a ball.

Or,

Inspissated juice of the white garden lettuce	½ dr.
Tincture of balsam of Tolu	1 dr.
Powdered gum arabic and extract of liquorice	1 oz. each

Make into balls, and give one night and morning.

The following I have found to mitigate the severity of several cases, and it deserves a trial:—

Extract of cicuta	½ dr.
Extract of hyoscyamus	10 gr.
Powdered digitalis	a scruple

Conserve of roses to make 10, 8, or 6 balls, according to the size of the dog; of which one may be given night and morning; increasing the dose if it occasions no disturbance in the system. Mr. Youatt has, I believe, found benefit in asthmatic cases from the exhibition of prussic acid: but the powerful nature of this remedy requires *professional* assistance when it is administered.—*Blaine.*

Astringent, *a.* Binding, contracting.

Astringents are useful in suppressing unnatural evacuations in diarrhœa, diabetes, &c. Opium, bark, and preparations of copper, iron, lead, and zinc, are principally employed in combining astringent preparations.

ASTRINGENT RECIPES.

No. 1.—*For diarrhœa, diabetes, &c.*

Opium	½ to 1 dr.
Ginger	1½ drs.
Prepared chalk	3 dr.
Flour	2 dr.

Mix into a ball with treacle, syrup, or honey for one dose.

No. 2.—Gum kino	2 dr.
Aromatic powder	1½ dr.
Or, Veterinary aromatic powder	6 dr.
Carbonate of soda	2 dr.

Treacle enough to form the mass.

No. 3.—Powdered catechu	2 to 4 dr.
Alum	2 to 4 dr.
Powdered opium	½ to 1 dr.
——— ginger	1 to 2 dr.
Oil of cloves	10 drops.

Treacle enough to form the ball.

Astringent Drench for diabetes.

Opium	½ dr.
Powdered ginger	2 dr.
Powdered oak bark	1 oz.

To be given in a pint of oak bark decoction.

External Astringents.

POWDERS.

No. 1.—Powdered alum	4 oz.
Armenian bole	1 oz.—Mix.
No. 2.—White vitriol	2 oz.
Flowers of zinc	1 oz.—Mix.

LOTIONS.

No. 3.—A strong goulard mixture.

No. 4.—A solution of blue vitriol, white vitriol, or alum.

No. 5.—Muriate of iron	1 oz.
Water	8 oz.—Mix.

OINTMENTS.

No. 1.—Venice turpentine	4 oz.
Bees' wax	1 oz.
Hog's lard	4 oz.

To be melted over a slow fire; and when rather cool, but while it is liquid, add sugar of lead 1 oz. or alum finely powdered, 2 oz. Stir the mixture until it is cold.

No. 2.—Ointment of yellow resin	4 oz.
Oil of turpentine	1 oz.
Sulphate of copper finely powdered	½ oz.—Mix.

No. 3.—Red nitrated mercury, commonly named red precipitate, rubbed down to a very fine powder	1 dr.
Calamine cerate, commonly named Turner's cerate	2 oz.—Mix.

Astringent powders and ointments are designed chiefly as remedies for grease, after the inflammation of the part has been in great measure removed by proper poultices: but the ointment is applicable only to those ulcerations or cracks which are effects of that disease, or occurring from other causes.

ADDITIONAL RECIPES FOR INTERNAL ASTRINGENTS.

For diabetes, or an excessive discharge of urine:

No. 1.—Catechu, or kino,	2 to 4 dr.
Powdered ginger	1 to 2 dr.
——— gentian	2 to 3 dr.
Opium	½ dr.
Oil of caraways	20 drops.

Syrup enough to form the ball. One dose.

No. 2.—Opium	½ to 1 dr.
Ginger	1 to 2 dr.
Cinchona, or Peruvian bark, or when that cannot be had, powdered oak bark	1 oz. or more.

To be mixed with a decoction of oak bark, or a strong infusion of camomile flowers, and given as a drench. Either of these may be given early in the morning, and repeated at night, should it be found necessary.—*White.*

Athletic, *a.* Belonging to wrestling; strong of body, vigorous, lusty, robust.

AUBURN, *a.* Brown, of a tan colour.

AUCUPATION, *s. obs.* Fowling, bird-catching.

AUK, *s.* (*Alca impennis*, LINNÆUS).

This species appears to have become extremely rare on the north coast of Britain. The natives in the Orkneys informed Mr. Bullock, in his late tour through those islands, that one male only had made his appearance for a long time, which had regularly visited Papa Westra for several years. The female (which the natives call the Queen of the Auks) was killed just before Mr. Bullock's arrival. The King, or male, Mr. Bullock had the pleasure of chasing for several hours, in a six-oared boat, but without being able to kill him, for though he frequently got near him, so expert was the bird in its natural element, that it appeared impossible to shoot him. The rapidity with which he pursued his course under water was almost incredible.

The length is three feet. The bill is black, very strong, compressed, and marked with several furrows. The base of the upper mandible is covered with short velvet-like feathers; between the bill and the eye is a large patch of white; the head, neck, back, and wings, glossy black; lesser quill-feathers tipped with white; legs black.

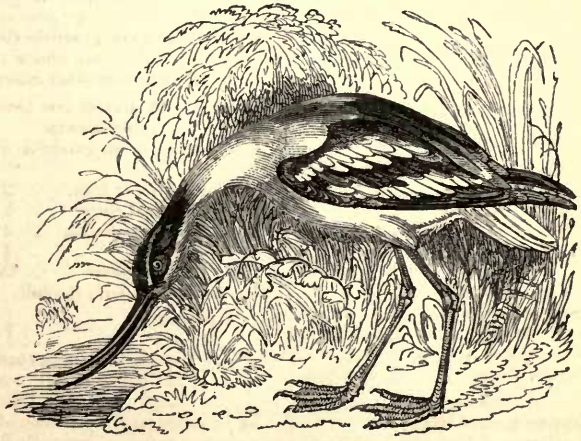
The smallness of the wings renders them useless for flight, the longest quill-feather not exceeding four inches in length. These, however, are admirably adapted to its mode of life, and are of peculiar use in diving under water, where they act as fins; by which means it pursues its prey with astonishing velocity.

This bird is only found in the most northern parts of the kingdom; it is said to breed in the isle of St. Kilda, from which Dr. Fleming had one in 1822. Like the rest of this genus it lays only one egg, white, sometimes irregularly marked with purplish lines, or blotched with ferruginous and black at the larger end: length six inches. It feeds on fish, but the young birds will eat rose root (*Rhodiola rosea*), or other plants.—*Montagu.*

AURICULARS, *s.* (In *Ornithology*). Feathers which cover the ears.

AVOIRDUPOIS, *a.* A kind of weight, of which a pound contains sixteen ounces, and is in proportion to a pound Troy as 17 to 14.

AVOSET, Scooper, Crooked-Bill, or Yelper. *s.* (*Recurvirostra Avosetta*, LINNÆUS. *L'Avosette*, BUFFON.)



This bird, which is the only British species of Avosets, does not much exceed the lapwing in the bulk of its body; but from the length of its legs it is much taller. It measures about eighteen inches in length, to the end of the toes twenty-two, and from tip to tip thirty; and weighs from twelve to fourteen ounces. The bill is black, about three inches and a half long, and of a singular conformation; looking not unlike flexible flat pieces of

whalebone, curved upwards to the tip: the irides are hazel; the head round, black on the upper part to below the nape of the neck: above and beneath each eye, in most specimens, there are small white spots; but in the one from which the above figure was taken, a streak of that colour passed over each eye towards the hinder part of the head. The thighs are naked, and, as well as the legs and feet, are of a fine pale blue colour. The whole plumage of the Avoset is white, intersected with black; and, like most of the variegated or piebald birds, the patches of these colours are not placed exactly the same in every individual; therefore, as the bird cannot be mistaken, a more minute description is unnecessary.

These birds are common in the winter about the lakes, mouths of rivers, and marshes, in the southern parts of England; and they assemble in large flocks on the fens, in the breeding season. When the female is frightened off her nest she counterfeits lameness; and when a flock is disturbed they fly with their necks stretched out, and their legs extended behind over the head of the spectator, much in the same way as the peewit or lapwing, making a shrill noise, and uttering a yelping cry of twit, twit, all the time. The places where they have been feeding may be traced out by the semicircular marks left in the mud or sand by their bills, in scooping out their food, which consists of spawn, worms, insects, &c. Latham says, "They lay two eggs, the size of those of a pigeon, an inch and three quarters in length, of a cinereous grey, singularly marked with deep brownish dark patches, of irregular sizes and shapes, besides some under markings of a dusky hue." They keep near the shore, wading about, up to the belly in the water, and sometimes swimming. In all their motions they are smart, lively, and volatile, and do not remain long stationary in one spot.

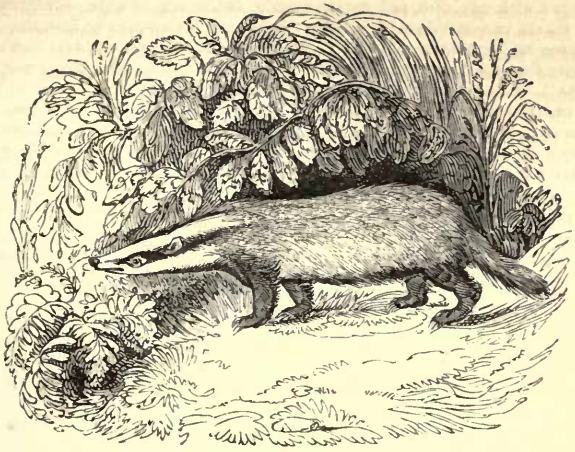
* * *

The Scooper is the only species found in England. It breeds in the fens of Lincolnshire, and on Romney Marsh in Kent. It does not migrate, like other birds of similar habits, but is found at all seasons, though in winter it chiefly frequents the sea-shore; and, besides on the coast of Kent, it is found about the mouth of the Severn, in Gloucestershire, as well as on the eastern coasts of Norfolk and Suffolk, and sometimes in Shropshire. During the breeding season, the Avosets are seen in considerable numbers near Fossdike, in Lincolnshire, and also in the fens of Cambridgeshire, and similar localities. Temminck says it is common in North Holland. It seems, indeed, to be very widely diffused, being found in Denmark, Sweden, Russia, Siberia, the Caspian Sea, and particularly about the Salt Lakes in the deserts of Tartary.—*Bewick—Latham—Montagu.*

Awning, *s.* A cover spread over a boat or vessel to keep off the weather.

Axle, Axle-tree, *s.* The pin which passes through the midst of the wheel, on which the circumvolutions of the wheel are performed.

Azure, *a.* Blue, faint blue.



THE BADGER.

BABBLE, *v.* To open on a false scent.

BABILLARD, *s.* (*Curruca garrula*, BRISSON.)

A species confounded by British naturalists with the white-throat. (Vide MONTAGU.)

The babillard does not appear to be a plentiful species in this country, and is confined to the western parts of the kingdom, from Gloucestershire and Wiltshire, in both which counties we have found them, and is probably in part of Somersetshire, but not in Devonshire or Cornwall. Selby even doubts its existence; but Sweet has kept them in a cage for years.

In some seasons it is very plentiful about London; at other times much scarcer. I am confident I have seen it in Ayrshire, and at Musselburgh Haugh, near Edinburgh.—*Rennie.*

BACK, *s.* The hinder part of the body; the outer part of the hand when it is shut; the rear; the place behind; the part of any thing out of sight; the thick part of any tool, opposed to the edge.

BACK, *v.* To mount a horse; to break a horse; to place upon the back; to maintain; to support; to bet on.

BACKGAMMON, *s.* A play or game with dice and tables.

The *game of tables* is better known at present by the name of Backgammon. This pastime is said to have been discovered about the tenth century, and the name derived from two Welsh words signifying "little battle." But the derivation may be found nearer home. The words are perfectly Saxon, as Bac, or Bæc, and Zamen, that is, Back Game; so denominated because the performance consists in the players bringing their men back from their antagonist's tables into their own; or because the pieces are sometimes taken up and obliged to go back, that is, re-enter at the table they came from.

The most material circumstances in which the game differed, at this remote period, from the present method of playing it, was, first, in having three dice instead of two, or reckoning

a certain number for the third; and secondly, in placing all the men within the antagonist's table, which, says an ancient writer, must be put upon his ace point. There is also another game upon the tables, called Paume Caric, which is played with two dice, and requires four players, that is, two on either side; or six, and then three are opposed to three. The same authority then speaks of a third game, called Ludus Lombardorum, tho Game of Lombardy, and thus played: he who sits on the side marked 13—24 has his men at 6, and his antagonist has his men at 19; which is changing the ace point in the English game for the size point: and this alteration probably shortened the game. He mentions the five following variations by name only; the Imperial game, the Provincial game, the games called Baralie, Mylys, and Faylis.

At the commencement of the last century, backgammon was a very favourite amusement, and pursued at leisure times by most persons of opulence, and especially by the clergy; which occasioned Dean Swift, when writing to a friend of his in the country, sarcastically to ask the following question: "In what esteem are you with the vicar of the parish: can you play with him at backgammon?" But of late years this pastime is become unfashionable, and of course not so much practised.

* * *

This game is played with dice upon a table by two persons, upon which there are twenty-four black and white spaces, called points. Each adversary has fifteen men, black and white, to distinguish them, and they are disposed of in the following manner. Supposing the game to be played into the right hand table, two are placed upon the ace point in the adversary's table, five upon the six point in the opposite table, three upon the cinque point in the hithermost table, and five on the sixth point in the right hand table. The grand object in this game is for each player to bring the men round into his right hand table, by throwing with a pair of dice those throws that contribute towards it, and at the same time prevent the adversary doing the like. The first best throw upon the dice is esteemed aces, because it stops the six point in the outer table, and secures the cinque in the thrower's table, whereby the adversary's two men upon the thrower's ace point cannot get out with either quatre, cinque, or six. This throw is an advantage often given to the antagonist by the superior player. When he carries his men home in order to lose no point, he is to carry the most distant man to his adversary's bar point, that being the first stage he is to place it on; the next stage is six points farther, viz. in the place where the adversary's five men are first placed out of his tables. He must go on this method till all his men are brought home, except two, when, by losing a point, he may often save the gammon, by throwing two fours or two fives. When a hit is only played for, he should endeavour to gain either his own or adversary's cinque point, and if that fails by his being hit by the adversary, and he finds him forwarder than himself, in that case he must throw more men into the adversary's tables, which is done in this manner: he must put a man upon his cinque or bar point, and if the adversary fails to hit it, he may then gain a forward game instead of a back game; but if the adversary hit him, he should play for a back game, and then the greater number of men which are taken up makes his game the better, because by these means he will preserve his game at home, and then he should endeavour to gain both his adversary's ace and trois points, and take care to keep three men upon the adversary's ace point, that, in case he hits him from thence, that point may remain still secure to himself. A back game should not be played for at the beginning of a set, because it would be a great disadvantage, the player running the risk of a gammon to win a single hit.

A variety of instructions with regard to this curious game are given by Mr. Hoyle, who calculates the odds of the game with great accuracy. The following particulars, however, may be of use to the generality of players. If a player has taken up two of the adversary's men, and happens to have two, three, or more points made in his own tables, he should spread his own men, that he may either take a new point in his tables, or be ready to hit the man which the adversary may happen to enter. If he finds upon the adversary's entering, that the game is upon a par, or that the advantage is on his own side, he should take the adversary's man up whenever he can, it being twenty-five to eleven that he is not hit, except when he is playing for a single hit only, then, if playing, the throw otherwise gives him a better chance for it, he ought to do it. As it is five to one against his being hit with double dice, he should never be deterred from taking up any one man of the adversary's. If he has taken up one of the adversary's men, and should happen to have five points in his own tables, and forced to leave a blot out of his tables, he should endeavour to leave it upon doublets preferable to any other chance; because the odds are thirty-five to one that he is not hit, whereas it is only seventeen to one but he is hit upon another chance. When the adversary is very forward, a player should never move a man from his own quatre, trois, or deuce points, thinking to bear that man from the point where he put it, as nothing but high doublets can give him any chance for the hit. Instead of playing an ace

or a deuce from any of these points, he should play them from his own size or highest points, so that throwing two fives or two fours, his size and cinque points being eased, would be a considerable advantage to him, whereas, had they been loaded, he must have been obliged to play otherwise. It is the interest of the adversary to take up the player as soon as he enters. The blot should be left on the adversary's lowest point, that is to say, upon his deuce point, rather than upon his trois point, or upon his trois point rather than upon his quatre point, or upon his quatre point preferable to his cinque point, for a reason before-mentioned; all the men the adversary plays upon his trois or his deuce points are deemed lost, being greatly out of play, so that those men not having it in their power to make his cinque point, and his game being crowded in on one point, and open in another, the adversary must be greatly annoyed by the player. If the player has two of his adversary's men in his tables, he has a better chance for a hit than if he had more, provided his game is forwarder than that of his antagonist, for if he had three or more of his adversary's men in his tables, he would stand a worse chance to be hit. When a player is running to save the gammon, if he should have two men upon his ace point, and several men abroad, although he should lose one point or two in his putting his men into his tables, it is his interest to leave a man upon his adversary's ace point, because it will prevent his adversary from bearing his men to the best advantage, and at the same time the player will have a chance of the adversary's making a blot which he may chance to hit. However, if a player finds, upon a throw, that he has a probability of saving his gammon, he should never wait for a blot, as the odds are greatly against his hitting it, but should embrace that opportunity.

The following are directions for calculating the odds of saving or winning the gammon:— Suppose the adversary has so many men abroad as require three throws to bring them into his tables, and at the same time that the players' tables are made up, and that he has taken up one of the adversary's men, in this case it is about an equal wager that the adversary is gammoned. For, in all probability, the player has borne two men before he opens his tables, and when he bears the third man, he will be obliged to open his size or cinque point. It is then probable, that the adversary is obliged to throw twice before he enters his men in the player's tables, twice before he puts that man into his own tables, and three throws more to put the men which are abroad into his own tables, in all seven throws. Now the player having twelve men to bear, he may be forced to make an ace or a deuce twice before he can bear all his men, and consequently will require seven throws in bearing them; so that, upon the whole, it is about equal whether the adversary is gammoned or not. Suppose a player has three men upon his adversary's ace point, and five points on his own tables, and that the adversary has all his men in his tables, three upon each of his five highest points, has the player a probability of gammoning his adversary or not?

	POINTS.
For bearing three men from his sixth point is . . .	18
From his fifth point . .	15
From his fourth point . .	12
From his third point . .	9
From his second point . .	6
In all . .	60
Bringing his three men from the adversary's ace point, to his size point in his own tables, being eighteen points each, and making together .	54
There must remain .	6

It is plain from this calculation, that the player has much the best of the probability of the gammon, exclusive of one or more blots which the adversary is liable to make in bearing his men, supposing at the same time the throws to be upon an equality. Suppose two blots are left, either of which cannot be hit but by double dice, one must be hit by throwing eight, and the other by throwing nine, so that the adversary has only one die to hit either of them.

The chances of two dice, being in all .	36
The chances to hit six, are six and two twice . . .	2
Five and three twice . .	2
Two deuces . . .	1
Two fours . . .	1
The chances to hit nine are six and three twice . . .	2
Five and four twice . .	2
Two trois . . .	1
For hitting in all .	11
Chances for not hitting, remain	25

So that the odds are twenty-five to eleven against hitting either of these blots.

This method may be taken to find out the odds of hitting three, four, or five blots upon double dice, or blots made upon double or single dice at the same time. After knowing how many chances there are to hit any of those blots, they must be added together, and then subtracted from the number thirty-six, which are the chances of the two dices, and the question is solved.

The laws of backgammon are, first, If a man is taken from any point, it must be played,

if two men are taken from it they also must be played. Second, A man is not supposed to be played till it is placed upon a point and quitted. Third, If a player has only fourteen men in play, there is no penalty inflicted; because by his playing with a less number than he is entitled to, he plays to a disadvantage for want of the deficient man to make up his tables. Fourth, If he bears any number of men before he has entered a man taken up, and which of course he was obliged to enter, such men so borne must be entered again in the adversary's tables, as well as the man taken up. Fifth, If he has mistaken his throw and played it, and his adversary has thrown, it is not in the choice of either of the players to alter it, unless they both agree so to do.

The probable method of prolonging a hit at backgammon, affords a case of instruction as well as curiosity; for there is a probability of making the hit last by one of the players for many hours, although they shall both play as fast as usual. Suppose B to have borne thirteen men, and that A has his fifteen men in B's tables, viz. three men upon his size point, as many upon his cinque, quatre, and trois points, two upon his deuce point, and one upon his ace point. A in this situation can prolong it by bringing his fifteen men home, always securing six close points till B has entered his two men, and brought them upon any certain point; as soon as B has gained that point A will open an ace, deuce, or trois point, or all of them, which done, B hits one of them, and A taking care to have two or three men in B's tables, is ready to hit that man, and also he being certain of taking up the other man, has it in his power to prolong the hit almost to any length, provided he takes care not to open such points as two fours, two fives, or two sixes, but always to open the ace, deuce, or trois points, for B to hit him. We add the following two critical cases for a back game. First, suppose the fore game to be played by A, and that all his men are placed as usual, B has fourteen of his men placed upon his adversary's ace point, and one man upon his adversary's deuce point, and B is to throw who has the best of the hit; answer, A has the best of it, gold to silver, because, if B does not throw an ace to take his adversary's deuce point, which is twenty-five to eleven against him, A will take up B's men in his tables either singly or make points, and then if B secures either A's deuce or trois point, A will put as many men down as possible, in order to hit and thereby get a back game. It is evident that the back game is powerful, consequently, whoever practises it must become a greater proficient at the game than he could by any other means. Second, Suppose A to have five men placed upon his size point, as many upon his quatre point, and the same number upon his deuce point, all in his own tables. At the same time let us suppose B to have three men placed upon A's ace point, as many upon A's trois point, and the same number upon A's cinque point, in his own tables, and three men placed as usual out of his tables, who has the best of the hit? Answer—The game is equal till B has gained his cinque and quatre points in his own tables, which, if he can effect, and by playing two men from A's cinque point, in order to force his adversary to blot by throwing a cane, which should B hit, he will have the best of the hit.—*Strutt—Ency. Lon.—Hoyle.*

BACKSIDE, *s.* The hinder part of any thing; the hind part of an animal.

BACK-SINEWS, strains in.

The symptoms are swelling, heat, and proportionate degree of lameness. Bleeding and rest are absolutely necessary, assisted by an emollient poultice from the hoof to the knee. A flannel bag, or large woollen stocking, secured above the shoulder by a tape, is the best mode of applying the poultice. All movement of the knee should be avoided.

BACON, *s.* The flesh a hog salted and dried.

BADGER, *s.* A brock, an animal.

The usual length of the badger is two feet six inches, exclusive of the tail, which is barely six inches long, and covered with long hair, the same as those of the body; the weight from fifteen to thirty-four pounds—the last is rare, but in the winter of 1779, Mr. Pennant had a male badger of that weight; the eyes are very small, the ears short and rounded; the neck thick, and the whole shape of the body clumsy, and which being covered with long coarse hairs, like bristles, adds to its awkward appearance; each hair next the root is of a dirty, yellowish white, the middle is black, and the extremity grey; hence arose the old saying, "As grey as a badger." It has thirty-four teeth, six cutting and two canine teeth in each jaw—the lower and upper have each five grinders; the nose, chin, and lower sides of the cheeks are white; each ear and eye is inclosed in a pyramidal bed of black, the base of which incloses the former,—this point extends beyond the eye to the nose; the throat

and under parts of the body are black. This is a singularity in the badger, for all other animals have hair of a lighter colour upon their bellies, than upon their backs. The legs and feet of the badger are black, very short, and strong; each foot is divided into five toes, those in the fore feet are armed with long claws, well adapted for digging its subterraneous habitation, where, although there is but one entrance from the surface, it forms several apartments, and in the breeding season carries in grass in his mouth, to form a bed for its young. It confines itself to its hole during the day, feeding only at night. It is so cleanly as never to obey the calls of nature in its own burrow. It is said the fox takes advantage of this niceness, and uses an obvious method to make the badger's home unpleasant, of which he by this means possesses himself. In walking, the badger treads on his whole heel, like the bear, which brings the belly very near the ground. Immediately below the tail, between that and the anus, there is a narrow transverse orifice, from whence continually exudes a white substance of a very fœtid smell: this seems peculiar to the badger and the hyæna.

Badger-Hunting, *s.*

Few creatures defend themselves better, or bite with greater keenness, than the badger: on that account it is frequently baited with dogs trained for that purpose, and defends itself from their attacks with astonishing agility and success. Its motions are so quick, that a dog is often desperately wounded in the moment of assault, and obliged to fly. The thickness of the badger's skin, and the length and coarseness of its hair, are an excellent defence against the bites of the dogs; its skin is so loose as to resist the impression of their teeth, and gives the animal an opportunity of turning itself round, and wounding its adversaries in their tenderest parts. In this manner this singular creature is able to resist repeated attacks both of men and dogs, from all quarters, till, being overpowered with numbers, and enfeebled by many desperate wounds, it is at last obliged to yield.

In hunting the badger, you must seek the earths and burrows where he lies, and, in a clear moonlight night, go and stop all the burrows except one or two, and therein place some sacks, fastened with drawing strings, which may shut him in as soon as he strains the bag. Some only place a hoop in the mouth of the sack, and so put it into the hole; and as soon as the badger is in the sack, and strains it, the sack slips from the hoop, and secures him in it, where he lies trembling till he is taken from his prison.

The sacks or bags being thus set, cast off the hounds, beating about all the woods, hedges, and tufts round about, for the compass of a mile or two, and what badgers are abroad, being alarmed by the hounds, will soon betake themselves to their burrows. Observe that the person who is placed to watch the sacks, must stand close, and upon a clear wind, otherwise the badger will discover him, and immediately fly some other way into his burrow.

But if the dogs can encounter him before he can take his sanctuary, he will then stand at bay like a boar, and make good sport, vigorously biting and clawing the dogs. In general, when they fight, they lie on their backs, using both teeth and nails; and, by blowing up their skins, defend themselves against the bites of the dogs and the blows given by the men. When the badger finds that the terriers yearn him in his burrow, he will stop the hole between him and the terriers; and if they still continue baying, he will remove his couch into another chamber or part of the burrow, and so from one to another, barricading the way before them as he retreats, till he can go no farther.

If you intend to dig the badger out of his burrow, you must be provided with such tools as are used for digging out a fox: you should also have a pail of water ready to refresh the terriers when they come out of the earth to take breath and cool themselves.

It is no unusual thing to put some small bells about the necks of the terriers, which, making a noise, will cause the badger to bolt out.

In digging, the situation of the ground must be observed and considered; or instead of advancing the work, you probably may hinder it. In this order you may besiege them in their holds, or castles, and break their platforms, parapets, and casemates, and work to them with mines and countermines, till you have overcome them.

We must do this animal the justice to observe, that, though nature has furnished it with formidable weapons of offence, and has besides given it strength sufficient to use them with great effect, it is, notwithstanding, very harmless and inoffensive, and, unless attacked, employs them only for its support.

The badger is an indolent animal, and sleeps much: it confines itself to its hole during the whole day, and feeds only in the night. It is so cleanly as never to defile its habitation with its ordure. Immediately below the tail, between that and the anus, there is a narrow transverse orifice, from whence a

white substance, of a very fœtid smell, constantly exudes. The skin, when dressed with the hair on, is used for pistol furniture. Its flesh is eaten: the hind quarters are sometimes made into hams, which, when cured, are not inferior in goodness to the best bacon. The hairs are made into brushes, which are used by painters to soften and harmonise their shades.

In walking, the badger treads on its whole heel, like the bear, which brings its belly very near the ground.

Extraordinary Affection in the Badger.—Two persons were on a short journey, and passing through a hollow way, a dog which was with them, started a badger, which he attacked, and pursued, till he took shelter in a burrow under a tree. With some pains they hunted him out, and killed him. Being a very few miles from a village, called Chapellatiere, they agreed to drag him there, as the commune gave a reward for every one which was destroyed; besides, they purposed selling the skin. Not having a rope, they twisted some twigs, and drew him along the road by turns. They had not proceeded far, when they heard a cry of an animal in seeming distress, and stopping to see from whence it proceeded, another badger approached them slowly. They at first threw stones at it, notwithstanding which it drew near, came up to the dead animal, began to lick it, and continued its mournful cry. The men, surprised at this, desisted from offering any further injury to it, and again drew the dead one along as before; when the living badger, determining not to quit its dead companion, lay down on it, taking it gently by one ear, and in that manner was drawn into the midst of the village; nor could dogs, boys, or men, induce it to quit its situation by any means, and, to their shame be it said, they had the inhumanity to kill it, and afterwards to burn it, declaring it could be no other than a witch.—*Buffon—Daniel.*

Bag, *s.* A sack, a pouch; that part of animals in which some particular juices are contained, as the poison of vipers.

Bag, *v.* To put into a bag. In sporting parlance, to kill.

Bagatelle, *s.* A trifle; a game.

Bait, *v.* To put meat to tempt animals.

Bait, *s.* Meat set to allure animals to a snare; a temptation; an enticement; a refreshment on a journey. In Fishing, worms, paste, &c.

Balance, *s.* A pair of scales; the overplus of weight; equipoise.

Balance, *v.* To weigh in a balance; to counterpoise.

Bald, *a.* Without hair; without natural covering.

Balk, *s.* A ridge of land left unploughed; disappointment when least expected. In Hunting, a term used when a horse refuses his leap.

Balk, *v.* To disappoint; to frustrate. In Hunting, to swerve off from a fence; to refuse a jump.

Ball, *s.* Anything made in a round form; a round thing to play with, a hand-ball, a billiard-ball.

Balls (*in farriery*) are boluses given to horses, and should not exceed in size a hen's egg. Though named balls, they are generally rolled up in a cylindrical form, about one inch in diameter, and two and a half in length; but the form of an egg is preferable. There is sometimes difficulty in giving balls, without using a balling iron; and there are horses that will not take a ball by any other means. In giving it, the horse's tongue is drawn out on the off or right side, and held firmly with the left hand, while with the right the ball is passed over the tongue into the pharynx, or top of the gullet. The hand should be kept as near to the roof of the mouth as possible; there will then be much less danger of being wounded by the teeth. The moment the right hand is withdrawn from the mouth, the tongue is let loose, and the ball generally swallowed.

Balls should be made at the time they are wanted; as by keeping they become so hard as to be insoluble in the stomach, and pass through the intestines unchanged. By keeping they also lose much of their strength, particularly when the ingredients are evaporable in the common temperature of the atmosphere, which is the case with camphor, ammonia, essential oils, &c. But the most serious inconvenience which arises from giving

balls that have been kept until they become very hard, is, that they are liable to stick in the throat or gullet, and thereby endanger the horse's life.

Balls cannot be conveniently given unless wrapped up in paper: but for this purpose the softest and thinnest should be chosen.

In holding the tongue with the left hand while the ball is introduced, great care is required, as the rough and violent manner in which this is sometimes done, injures the tongue or lacerates the under part of it, named the bridle. The muscles by which swallowing is effected may also be seriously injured in this way. In violent colds, strangles, &c. there is so much soreness of the throat as to render swallowing very painful and difficult; in such cases neither balls nor drenches should be given, as they are sure to do mischief by irritating the throat, and may even suffocate the animal by getting into the wind-pipe.

When a ball is found to exceed the proper size, it should be divided and given at twice, as much injury has been done by giving balls too large, especially when they have become dry and hard, or been wrapped in thick paper. In making balls, the dry ingredients should be finely powdered and well mixed, and the liquid for forming them should be adapted to the nature of the other ingredients. When a ball contains any acrid, or very powerful ingredient, such as sublimate or arsenic, flour and paste may be employed for mixing it up, and a small bran mash should be given a little before or after it. After giving a ball, grooms sometimes press or pinch the throat for the purpose of making the horse swallow it; but this should never be done, as it is apt to excite coughing, by which swallowing is prevented. The only thing necessary after the hand is withdrawn is to keep the mouth shut, and press the nose downwards, in a moderate degree, towards the chest.—*White.*

Balling-Iron, *s.* An instrument used in administering balls to horses, It is intended to keep the mouth open while the ball is being introduced, and answers the double purpose of assisting the groom in the operation, and saving his hand from injury from the horse's teeth. In its use, it should be carefully covered with cloth, to prevent the tongue of the animal from being lacerated.

Balm, *s.* The sap or juice of a shrub, remarkably odoriferous, and of healing qualities; any valuable or fragrant ointment; anything that soothes or mitigates pain.

Balsam, *s.* A thick fluid soluble in spirit of wine.

Balsams are a kind of resinous juice, united with some of the extractive matter of the various plants they are obtained from, in combination with an essential oil. All the balsams are occasionally in use in veterinary medicine, and were formerly in very high estimation, for their supposed salutary action in chronic diseases of the lungs. They were also considered as a sovereign vulnerary for abraded urinary passages. It is the modern doctrine to think their efficacy overrated, and which is probably in some respects true, particularly as regards their expectorant qualities: nevertheless they are far from being inert; on the contrary, they appear to act favourably in some instances, as a warm terebinthinated stimulant. The principal balsams dispensed in veterinary practice are these:—

Balsam of Canada.—A strong diuretic, used in chronic cough and diseases of the lungs.

Balsam of Copaiba, or *Capivi.*—Possesses similar properties to that of Canada.

Balsam of Friars.—Now called *Tincture of Benjamin*, an excellent traumatic.

Balsam of Gilead.—Similar in its properties to Copaiba.

Balsam of Peru.—A stimulant; used externally to irritable ulcers.

Balsam of Tolu.—Same properties and uses as *Peru.*

Balsam of Sulphur.—An expectorant; in inflammatory coughs, however, its use is dangerous.

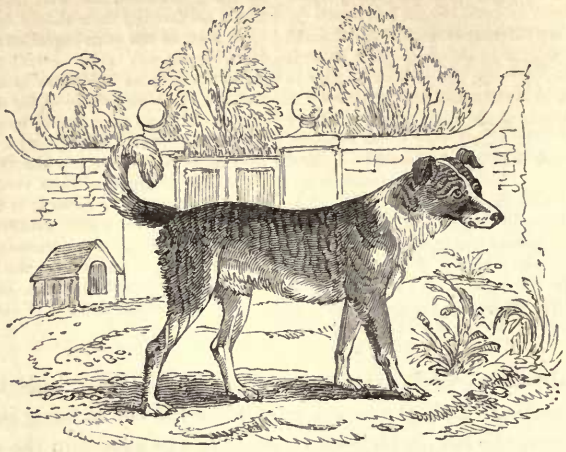
Outlines of Vet. Art.—*White.*

Balsamic, *a.* Unctuous, mitigating.

Bamboo, *s.* An Indian plant of the reed kind.

BANDALEERS, *s.* Small wooden cases covered with leather, each of them containing powder that is a sufficient charge for a musket. *Obs.*

BANDOG, (*Canis Villaticus,*) *s.* A mastiff.



This variety is lighter, smaller, and more active than the mastiff, from which he is descended by a cross with the foxhound. He is not near so powerful a dog as the former, but is more fierce in his natural disposition. From his descent, he possesses a finer sense of smelling than that dog. His hair is rougher, generally of yellowish or sandy grey, streaked with shades of black or brown, and semi-curled almost over his whole body; his legs, however, are smooth. Although he generally attacks his adversary in front, like the mastiff and bull dog, it is not his invariable practice, for he is sometimes seen to seize cattle by the flank. His bite is said to be severe and dangerous.—*Brown.*

BANDY, *s.* A club turned round at bottom for striking a ball.

BANDY-LEG, *s.* A crooked leg.

BANE, *s.* Poison, mischief.

BANK SWALLOW, RIVER SWALLOW, BANK MARTIN, or SAND SWALLOW, *s.* This is the smallest species of British Swallow; length four inches and three quarters. The whole upper parts of the plumage are of a mouse-coloured brown; the under parts white, except across the breast, which is brown; legs dusky, a little feathered behind; bill dusky; irides hazel. The Bank Swallow is not near so plentiful, and is more local than the other species.—*Montagu.*

BANTAM, *s.*

The Bantam, a well-known small breed, originally from India, is chiefly valued for its grotesque figure and delicate flesh.

There has been lately obtained a variety of bantams, extremely small, and as smooth legged as a game fowl. From their size and delicacy, they are very convenient, as they may always stand in the place of chickens, when small ones are not otherwise to be had. They are also particularly used for sitting upon the eggs of partridges and pheasants, being good nurses, as well as good layers. Sir John Sebright, M.P. for Herts, is one of the chief amateurs of this breed. Sir John's breed are beautifully striped and variegated.

In addition, there is a South American

variety, either from Brazil or Buenos Ayres, which will roost in trees. They are very beautiful, partridge-spotted and streaked; the eggs small, and coloured like those of the pheasant; both the flesh and eggs are fine flavoured and delicate.—*Moubray.*

Bar, *s.* A piece of wood laid across a passage to hinder entrance; a bolt to fasten a door; any obstacle; a rock or bank at the entrance of a harbour; anything used for prevention; a moveable piece of timber used in the menage to teach horses to leap.

Barb, *s.* Anything that grows in the place of the beard; the points that stand backward in an arrow.

Barb, *s.* A Barbary horse. *Vide* Arab and Horse.

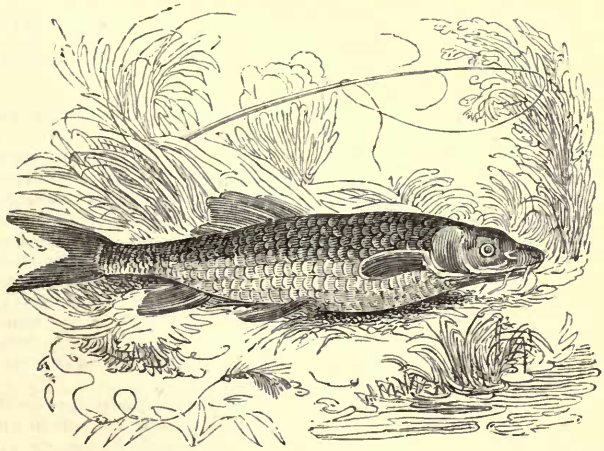
Barb, *v.* To jag arrows and fishing-hooks.

Barbadoes Tar, *s.* A bituminous substance of strong diuretic power. It is used in chronic coughs, and externally employed in strains and bruises.

Barbecue, *s.* A hog dressed whole.

Barbed, *a.* Bearded; jagged with hooks.

Barbel, *s.* A kind of fish found in rivers.



The Barbel is one of the coarsest fishes. In England they are deemed the worst of fresh-water fish, and seldom eaten but by the poorest sort of people, who sometimes boil them with a piece of bacon to give them a relish. The roe is very noxious, affecting those unwarily eating it with a vomiting, purging, and a slight swelling.

The Barbel takes its name from the barbs, or wattels, at his mouth. They begin to run up the rivers in March and April. When they spawn, they keep together in companies, making holes in the gravel wherein they cast it.

The head of the barbel is smooth, the nostrils are near the eyes; it has a leather mouth, which is placed below; on each corner is a single beard, and another on each side of the nose; the shape is long, round, and handsome; the dorsal fin is armed with a remarkably strong spine, sharply serrated; with which it can inflict a severe wound on the uncautious handler, and do much damage to the net. The side fin is straight; the scales are not large, and of a pale gold colour, edged with black; the belly white, the tail is a little bifurcated, and of a deep purple. It is sometimes found three feet in

length, and weighing eighteen pounds. According to the accounts in the Elements of Natural History, it is met with from two to fifteen feet long, grows quickly, is very tenacious of life, and lives to a great age.

If there be any difference in the taste of their flesh, they are most in season the latter end of the summer; but in fact they are not worth noticing, except for the sport the angler derives from the catching of them, and which, from their being so strong and determined a fish when hooked, is very great.—*Daniel.*

BARGE, *s.* A boat for pleasure; a boat for burthen.

BARGER, *s.* A river-keeper; the manager of a barge.

BARK, s. The rind or covering of a tree; a small ship.

BARK, *v.* To strip trees of their bark; to make the noise which a dog makes.

BARK, PERUVIAN, or CINCHONA, *s.* A tonic and febrifuge medicine. Its effects upon the horse are trifling; it is useful chiefly in diabetes. There are three qualities, pale, red, and yellow. The first is best.

BARK, OAK, *s.* An excellent substitute for Peruvian.

BARLEY, *s.* A grain of which malt is made.

BARM, *s.* Yeast; the ferment put into drink to make it work.

BARN, *s.* A place or house for laying up any sort of grain, hay, or straw.

BARNACLE, *s.* A kind of shellfish which attaches itself to timber floating at sea; a bird, *vide* BERNACLE.

BAROMETER, *s.* A machine for measuring the weight of the atmosphere, and the variations in it, in order chiefly to determine the changes of the weather.

Barometer.—There is no instrument now more generally used for ascertaining the coming weather than the barometer. It may however be remarked, that it is more from its rising or falling, than from its height or lowness that we are to infer fair or foul weather. Generally speaking, the rising of the mercury presages clear fair weather, and its falling, foul weather; as rain, snow, high winds, and storms.

In very hot weather, the falling of the mercury indicates thunder.

In winter the rising indicates frost, and in frosty weather, if the mercury fall three or four divisions, there will follow a thaw; but in a continued frost, if the mercury rise, it will snow.

When foul weather happens soon after the falling of the mercury, expect but little of it; and, on the contrary, expect but little fair weather when it proves fair shortly after the mercury has risen.

In foul weather, when the mercury rises much and high, and so continues for two or three days before the foul weather is over, then expect a continuance of fair weather to follow.

In fair weather, when the mercury falls much and low, and thus continues for two or three days before the rain comes, then expect a great deal of wet, and probably high winds.

The unsettled motion of the mercury denotes uncertain and changeable weather.

The words engraved on the register plate of the barometer, it may be observed, cannot be strictly relied upon to correspond exactly with the state of the weather; though it will in general agree with them as to the mercury rising and falling.

When the thermometer and barometer rise together in summer, with rain in large drops, a wholesome state of the atmosphere is at hand.

A great and sudden rising of the barometer, that is to say, a great accession of atmospherical pressure, will, in some persons, occasion a slight temporary difficulty of hearing and tingling in the ears, similar to that which is experienced in descending from high mountains, or from the air in balloons.—*Foster.*

BARREL, *s.* A round wooden vessel to be stopped close; a vessel containing liquor; anything hollow, as the barrel of a gun; a cylinder.

Barrel-making has occupied the attention of gun manufacturers from the first invention of fire-arms to the present time. Experiments in the material as well as the construction of barrels, have been extensively tried by the artists of every country. A gradual and progressive improvement was the result, until the *stub-barrel* of the present day has

superseded every other kind, and seems to have reached the utmost perfection that human ingenuity can accomplish.

The peculiar formation of barrels at different periods, and by different artists, will be interesting to sportsmen generally.

Spanish barrels have always been held in great esteem, as well on account of the quality of the iron,—which is generally considered the best in Europe—as because they possess the reputation of being forged and bored more perfectly than any others. It should be observed, however, that of the Spanish barrels, those only that are made in the capital are accounted truly valuable; in consequence of which a great many have been made at other places, especially in Catalonia and Biscay, with the names and marks of the Madrid gunsmiths. They are also counterfeited at Liege, Munich, &c.; and a person must be a good judge not to be deceived by these spurious barrels.

These barrels were formerly in such high repute, that the price of them was enormous. Those of Belen, Fernandez, and Bez, sold in France for a thousand livres, or 43*l.* 15*s.*; while the barrels of artists of lesser name produced three hundred, or 13*l.* sterling.

After the barrels of Madrid, those of Bustindui and St. Olabe, at Placentia, in Biscay, and of Jean and Clement Pedroesteva, Eudal Pous, and Martin Marechal, at Barcelona, are the most esteemed; these usually sell in France for eighty French livres, or 3*l.* 10*s.* sterling.

Almost all the barrels made at Madrid are composed of the old shoes of horses and mules, collected for the purpose. They are all welded longitudinally, but instead of being forged in one plate or piece, as in other countries, they are made, like the English twisted barrels, in five or six detached portions, which are afterwards welded one to the end of another, two of them forming the breech or reinforced part of the barrel. We may form some idea of the very great purity to which the iron is brought in the course of the operation, when we are told, that to make a barrel, which, rough from the forge, weighs only six or seven pounds, they employ a mass of mule-shoe iron, weighing from forty to forty-five pounds; so that from thirty-four to thirty-eight pounds are lost in the heatings and hammerings it is made to undergo before it is forged into a barrel.

Notwithstanding the great reputation of the Spanish barrels, however, they are little used in France, and still less in England, their awkward form and their great length and weight being strong objections to them, especially since they have begun to make their pieces so very light and short in these countries; and from our own experience of the Spanish barrels, we are convinced that the avidity with which they are sought after by some persons, and the extravagant prices that are given for them, proceed more from a fancied than from any real superiority they possess over those made in this country.

* * *

The Spanish gunsmiths pique themselves upon the very high polish they give to the inside of their barrels. We have our doubts about the advantage derived from this, and are still of opinion that if a barrel is so smooth as not to lead, it is better to take it as it comes from the hand of the manufacturer, than allow the gunsmith to practise any farther operation upon it. In support of this opinion, Mons. de Marolles informs us, that he has seen a barrel rough from the borer throw a charge of shot deeper into a quire of paper, than another barrel that was highly polished within, although the length, the bore, and the charge, were the same in both.

* * *

The *canons a ruban*, or *riband barrels* of the French, very much resemble the English twisted barrels. The process pursued in their formation is very troublesome, and seems to possess no countervailing advantage. A plate of iron about the twelfth part of an inch in thickness is turned round a mandril, and welded its whole length in the same manner as a plain barrel: upon this small and light barrel, which is called lining, a stripe or plate of iron, about an inch in breadth, and bevelled off at the edges, is rolled in a spiral direction, by means of successive heats—this spiral is termed the riband, and its thickness must correspond with the part of the barrel it is to constitute. As a riband of sufficient length to cover the lining from one end to the other would be very difficult to manage, it is formed in several pieces, and so soon as one piece is nearly rolled on, another is welded to the end of it, and the operation continued until the whole of the lining is covered. The edges are bevelled so much, that one edge overlaps the other about a quarter of an inch. When the riband is all rolled on, the barrel is heated by two or three inches at a time, and the turns of the spiral united to each other and to the lining, by being welded in the same manner as a twisted or plain barrel, but requiring more care and accuracy in the operation. It is afterwards bored, so that almost the whole of the lining is cut out, and scarcely anything left except the riband with which it was covered.

* * *

Lazarini Barrels, so called after the maker, were formerly celebrated throughout the greatest part of Europe. They were very long, and of a very small calibre. Lazarini lived at Brescia, about a hundred and fifty years ago. He did not forge these barrels himself, but he finished them with great accu-

racy, and ornamented them in a rich and elegant manner. At the time, however, when these barrels were in high estimation, there were numerous counterfeits bearing the name and mark of Cominazzo, and it requires some acquaintance with the genuine barrels not to be deceived by the spurious ones. The true Lazarini are now to be found only in the repositories of the curious.

The vanity of possessing something that is singularly curious, the false idea that whatever is expensive must necessarily be good, and sometimes, though rarely, the laudable desire of improvement, have all in their turns been the causes of a variety of experiments made in the manufacture of barrels. An artist in London, who wrought a great deal of Spanish iron, forged barrels from old scythes, from wire, from needles, and a great many other articles suggested by the whim of the customers —who made barrels with a lining of steel, and formed others with a double spiral of steel and iron alternately—confessed after these numerous trials, that "stub iron wrought into a twisted barrel is superior to every other." Whenever steel was employed, he found that the barrel neither welded nor bored so perfectly as when iron alone was used.

* * *

The *English stub barrels* are deservedly celebrated for their superior elegance and strength, as well as for the accuracy with which they throw their ball or shot. The iron employed in them is formed of stubs, which are old horse-shoe nails, procured from country farriers, and from poor people who gain a subsistence by picking them up on the great roads leading to the metropolis. These are originally formed from the softest, toughest iron that can be had, and this is still farther purified by the numerous heatings and hammerings it has undergone in being reduced from a bar into the size and form of nails. They cost about ten shillings the hundred weight, and twenty-eight pounds are required to make a single barrel of the ordinary size. A hoop of iron about an inch broad, or six or seven inches diameter, is placed perpendicularly, and the stubs, previously freed from dirt by washing, are neatly piled in it, with their heads outermost on each side, until the hoop is quite filled and wedged tight with them, the whole resembling a rough circular cake of iron. This is put into the fire, until it has acquired a white heat, when it is hammered either by the strength of the arm, or by the force of machinery, until it coalesces, and becomes one solid mass of iron. The hoop is then removed, and the heatings and hammerings repeated, until the iron, by being thus wrought and kneaded, is freed from every impurity, and rendered very tough and close in the grain. The workmen then proceeds to draw it out into pieces of about twenty-four inches in length, half an inch or more in breadth, and half an inch in thickness.

* * *

Damascus barrels are thus described by *Hawker*:—I saw the process of making them, the mixture of iron and steel for which is beat out in long bars, and then, previously to being wound round the anvil, twisted by a kind of turning lathe, (similar to wringing clothes when wet), and then beat flat again. Although these are by far the dearest barrels that are made, yet the price of one in Birmingham is very trifling, viz. :—

Forging - - -	£1	10	0
Boring and grinding -	0	5	0
Filing and patent breech -	0	11	0
Proof - - - -	0	1	6
	£2	7	6

The stub barrels, which are generally used for best guns, cost about sixteen shillings each."

The Damascene barrels are now unfashionable, and never had anything to recommend them, but as being a pretty novelty.

* * *

On boring of barrels there has been much diversity of opinion; and if Colonel Hawker's theory be correct, the bore should not be perfectly cylindrical.

With respect to the common sized guns, which are usually made for the sports of the field, there are two good ways of boring; the one is, to leave a cylinder for about three-fourths of the barrel, (always taking care, however, to preserve a tightness for a little friction just where the shot first moves), and let the remaining part be gradually relieved to the muzzle. For instance; suppose a barrel to be two feet eight inches long, we would say (beginning at the breech end) about six inches tight, twenty-one inches a cylinder, and the remaining five inches relieved to the muzzle. All this must be done with the most delicate possible gradation, and in so small a degree, that even some gun-makers could scarcely discover it. How natural, then, is it, that many sporting authors should be so far deceived, as to fancy the best guns are bored a true cylinder, and therefore, argue in its favour. This relief has the effect of making the gun shoot as close as it can do, compatibly with the strength and quickness required, which should, however, be increased as much as possible by the best constructed breechings.

The other plan is, to make the barrel regularly tighter all the way down, so that, in firing, the shot goes progressively easier as it approaches the muzzle. All this relief must be given in a very trifling degree, because, should the barrel be too much opened

in any part, it would admit of the powder escaping between the wadding and the sides of the calibre, by which the shooting of the gun would be rendered weak. For this reason, I should even object to having a hole through the wadding that covers the powder, which many do to prevent the confined air from resisting the ramrod. * *

The imperfections to which a barrel is liable in forging, are of three kinds, viz., the *chink*, the *crack*, and the *flaw*. The *chink* is a solution of continuity running lengthwise of the barrel. The *crack* is a solution of continuity more irregular in its form than the chink, and running in a transverse direction, or across the barrel. The *flaw* differs from both; it is a small plate or scale, which adheres to the barrel by a narrow base, from which it spreads out as the head of a nail does from its shank, and, when separated, leaves a pit or hollow in the metal.

With regard to the soundness of the barrel, the chink and flaw are of much greater importance than the crack, as the effort of the powder is exerted upon the circumference, and not upon the length of the barrel. In a sword or bow, the very reverse of this takes place, for if a crack, though but of a slight depth, occurs in either, it will break at that place, when bent but very little, because the effort is made upon the fibres disposed longitudinally, whereas, if the fault be a chink, or even a slight flaw, the sword or bow will not give way. The flaw is much more frequent than the chink, the latter scarcely ever occurring but in barrels forged as above, in which the fibres of the metal run longitudinally. When external and superficial, they are all defects in point of neatness only, but when situated within the barrel, they are of material disadvantage, by affording a lodgment to moisture and foulness that corrode the iron, and thus continually enlarge the excavation, until the barrel bursts, or becomes dangerous to use. * * *

Colonel Hawker says, "that a barrel may be pretty good, and perfectly safe, and yet not able to bear the scientific inspection of a first-rate maker or judge. That is, to hold the barrel up to the window, and gradually raise it, till the shade from above the window runs along its surface, by which inspection you will easily discover the most trifling want of finish."—*Essay on Shooting.*

BASILICON, *s.* An ointment; called also tetrapharmacon. It is now called ointment of yellow resin; it is a digestive.

BASIN, *s.* A small pond; a part of the sea enclosed in rocks; a dock for repairing and building ships.

BASKET-HILT, *s.* A hilt of a weapon, so made as to contain the whole hand.

BASSET, *s.* A game at cards.

BASTARD, *s.* Any thing spurious.

BASTARD, *a.* Spurious, supposititious, adulterate.

BAT, *s.* A heavy stick; an implement used in playing cricket; an animal having the body of a mouse, and the wings of a bird; not with feathers, but with a sort of skin which is extended. It brings forth its young as mice do, and suckles them.

Bats flitting about late in the evening, in spring and autumn—at which seasons they are most commonly seen—foretel a fine day on the morrow; as do door-beetles, and some other insects. On the contrary, when bats return soon to their hiding-places, and send forth loud cries, bad weather may be expected. —*Foster.*

BAT-FOWLING, *s.* Bird-catching in the night time.

This sport we call in England, most commonly bird-batting, and some call it *low-bell-ing;* and the use of it is to go with a great light of cressets, or rags of linen dipped in tallow, which will make a good light; and you must have a pan or plate made like a lantern, to carry your light in, which must have a great socket to hold the light, and carry it before you, on your breast, with a bell in your other hand, and of a great bigness, made in the manner of a cow-bell, but still larger; and you must ring it always after one order.—If you carry the bell, you must have two companions with nets, one on each side of you; and what with the bell, and what with the light, the birds will be so amazed, that when you come near them, they will turn up their white bellies: your com-

panions shall then lay their nets quietly upon them, and take them. But you must continue to ring the bell; for if the sound shall cease, the other birds, if there be any more near at hand, will rise up and fly away.—This is an excellent method to catch larks, woodcocks, partridges, and all other land-birds.—*Burton.*

BATH, *s.* A bath is either hot or cold, either of art or nature; a vessel of hot water, in which another is placed that requires a softer heat than the naked fire.

BATHE, *v.* To wash in a bath; to supple or soften by the outward application of warm liquors; to wash with any thing.

Both the warm and the cold bathings of dogs are attended, in many cases, with the happiest effects. When a *warm bath* is used for a dog, the *heat* should be regulated according to the case. In inflammations it should be considerable, and in rheumatisms also; but it must be remembered that, from habit, many persons can bear, without inconvenience, a heat that would be most distressing to a dog; consequently, when it is attempted to ascertain the heat by the hand alone, this circumstance should be considered.

The water bath should come all over the animal, except the head; and when any one particular part is more especially affected, that part ought to be rubbed during the bathing, with the hand. The dog being removed from the water, the utmost care should be observed to avoid his taking cold by exposure. He should be first rubbed as dry as may be by a change of cloths, and then be put into a clothes-basket, wrapped up in a blanket, and there confined till thoroughly dry.

Cold bathing is also, in some instances, very useful, particularly in the spasmodic twitchings that succeed distemper; and in some other cases of habitual weakness, as rickets, &c.: but for dogs in health, I am convinced that bathing is not so salutary as is often supposed.—*Blaine.*

* * *

In Falconry.—Hawks should bathe every five or six days, in a clear stream, or pool, of water, that is shallow at the edge; but when these are not at hand, eyesses may be made to bathe in pans sufficiently large for the purpose.

A moderate quantity of food is to be given to the hawk, before he is taken to the stream; a creance is to be tied to the leash, and fastened to the ground; he is then to be unhooded, and placed near the water. The falconer must then retire to a distance. When the hawk has bathed, he should be left to plume himself on the beach, as long as he remains quiet, but he must be cautiously taken up the moment he shows signs of uneasiness, lest he should *bait in the creance* with a full crop, which is always to be prevented by every possible precaution.—*Sebright.*

BATOON, *s.* A staff or club.

BATTLE-DOOR, *s.* An instrument with a round handle and a flat blade, to strike a ball or shuttlecock.

BATTU, *s.* The shooting of preserved game by a numerous company.

Those huntsmen who are so fond of unnecessarily getting blood and wasting foxes, would doubtless have been much gratified at the hunting match given by the Prince Esterhazy, Regent of Hungary, upon the signing the treaty of peace with France—a day's sport that bids fair to vie, in point of blood (if the King of Naples' slaughter be excepted), with any of those recorded in modern history; as there were killed, 160 deer, 100 wild boars, 300 hares, and 30 foxes. The king had a larger extent, and a longer period for the exercise of his talents, and it was proved that during his journey to Vienna, in Austria, Bohemia, and Moravia, he killed 5 bears, 1320 boars, 1960 deer, 1145 does, 1625 roebucks, 1121 rabbits, 13 wolves, 17 badgers, 16,354 hares, and 354 foxes; the monarch had likewise the pleasure of doing a little in the bird way, by killing, upon the same expedition, 15,350 pheasants, and 12,335 partridges.

* * *

After leaving Lucknow, we directed our course towards Baraeech; our kafeela consisted of about 40,000 men, and 20,000 beasts, composed of 10,000 soldiers, 1000 cavalry, and near 150 pieces of cannon; 1500 elephants, 3000 hackeries, and an innumerable train of camels, horses, and bullocks; a great number of ruts, filled with the Nawalis women; many large and small boats carried on carts, drawn by fifty, forty, thirty, or twenty bullocks; tigers, leopards,

hawks, fighting-cocks, quails, and nightingales; pigeons, dancing-women, and boys; singers, players, buffoons, and mountebanks. In short, his excellency had everything, every object which could please or surprise, cause a smile, or raise a sneer, attract admiration, fix with wonder, or convulse with laughter; captivate the eye, lull the ear, or tickle the palate. Above five hundred coolies were employed to carry his shooting apparatus, guns, powder, shot, and et ceteras; he had above a thousand double-barrelled guns, the finest that Manton and Nock could make, and single-barrels, pistols, swords, and spears, without number.

After a gay scene of every species of oriental amusement and dissipation, we returned to this place, having killed in our excursion eight tigers, six elephants, and caught twenty-one. To enumerate the other kinds of game would require a sheet as ample as the petition which was presented to Yenghis Khan, and might perhaps be treated by you in the manner that conqueror treated the petition.—

* * *

Ashbridge Castle, Hertfordshire, the seat of the Earl of Bridgewater, was lately a scene of great gaiety. The sports of the field, on the three days of the Duke of York's sojourn, were never before equalled. The Duke of Wellington's double-barrelled gun brought down everything before it. During the last four days, a party of gentlemen killed 623 head of game. Killed from eight guns, in three days, 1093 head of game:—

1st day,	7 guns,	627 shots,	326 killed.
2nd ..	9 ..	956 ..	511 ..
3rd ..	8 ..	388 ..	251 ..

The best shots were, the Duke of York, the Duke of Wellington, Lord Bridgewater, and Lord Verulam. The Duke of York killed, on the first day, forty-seven head of game.

* * *

In October, 1807, at Up Park, Sussex, the seat of Sir H. Featherstonhaugh, the extraordinary quantity of five hundred and one brace of game was shot, from Wednesday morning, the 7th, to Saturday night, the 10th instant, by a party visiting at the above mansion.

* * *

Lord Rendlesham and party killed three thousand seven hundred and seventy-five head of game, during the last week in the season of 1807.

* * *

On the day before one of the annual parties at Clumber broke up, two sets went out, each consisting of three persons, and a bet was laid which should kill most game. It was computed that, on an average, each man of the six got sixty shots; total, three hundred and sixty. The winning triumvirate killed three birds! The shooters were, Lord Lincoln, General Philips, Captain (afterwards General) Lascelles, Reverend Mr. Lascelles, Mr. Cotton, and Lieutenant Colonel Strickland. Here the game had a complete triumph over their adversaries.—*Daniel—Sporting Anecdotes.*

Bawrel, *s.* A kind of hawk. *Obs.*

Bawsin, *s.* A badger. *Obs.*

Bay, *a.* A colour.

Of the bays, there are many varieties, and they include the very best of our horses of every description. The bright yellow bay, although very beautiful, and especially if his mane and tail are black, is the least valuable, because the lightness of his colour seems to give him some tenderness of constitution. The proper bay, with no white about him, and black from the knees and the hocks to the feet, is the most desirable of all colours; he has generally a good constitution, naturally good feet, and, if his conformation is not faulty, will turn out a valuable horse for almost every purpose.—*The Horse.*

Bay, *s.* An opening in the land; the state of anything surrounded by enemies; a tree.

Bay, *v.* To bark, as a dog, at the moon; to shut in.

Bay Salt, *s.* Salt made of sea water, which receives its consistence from the heat of the sun, and is so called from its brown colour.

Bayard, *s.* A bay horse.

Beach, *s.* The shore; the strand.

Beadle, *s.* In *forestry*, is an officer that warns all the courts of the forest, executes process, makes all proclamations, &c. &c.

BEAGLE, *s.* A small hound, with which hares are hunted.

This is the smallest of the dogs of the chase which go under the general denomination of hound; meaning that kind which have the innate property of finding their game and pursuing it by what sportsmen call scent, which seems to be an impregnation of the atmosphere with certain effluvia issuing from the pores of the skin, and acting upon the olfactory membrane of the dog's nose.

Although the beagle is far inferior in point of speed to the harrier, yet his sense of smelling a hare is equally exquisite, and he pursues her with indefatigable vigilance, energy, and perseverance. Every winding and all the mazes are traced by him with a degree of exactness which must be seen to be properly understood and justly estimated, while the soft and melodious tones of his voice afford ecstatic pleasure to the lovers of the chase, and is thus finely described by Somerville:—

"Hark! from yon covert, where those towering oaks
Above the humble copse aspiring rise,
What glorious triumphs burst in every gale
Upon our ravish'd ears! The hunters shout,
The clanging horns swell their sweet winding notes,
The pack wide opening load the trembling air
With various melody; from tree to tree
The propagated cry redoubling bounds,
And winged zephyrs waft the floating joy
Through all the regions near.
The puzzling pack unravel, wile by wile,
Maze within maze."

Much emulation prevailed in former times among sportsmen in the breeding of beagles, and it was then the greatest merit to rear dogs of the smallest growth. Amongst amateurs of hunting, beagles were so carefully selected in point of size, that they seldom exceeded ten or eleven inches in height; and they were so well matched with respect to speed, that during the chase a good pack might be covered with a sheet. This is with all kinds of hounds a sure mark of excellence.

Although beagles are slow in speed, they are uncommonly eager; for, if the scent lies well, a hare has little chance of escape from them. Their slowness, however, is the principal reason of their being almost totally discontinued in packs, and that they are now seldom to be met with beyond a few couples, used in some of the southern counties of England to ensure finding more certainly in greyhound coursing.

Hunting with the beagle was admirably adapted for ladies and gentlemen up in years; and, besides, afforded much amusement to rustics, and other pedestrian hunters; for there were few male persons of any activity who could not keep up with them.

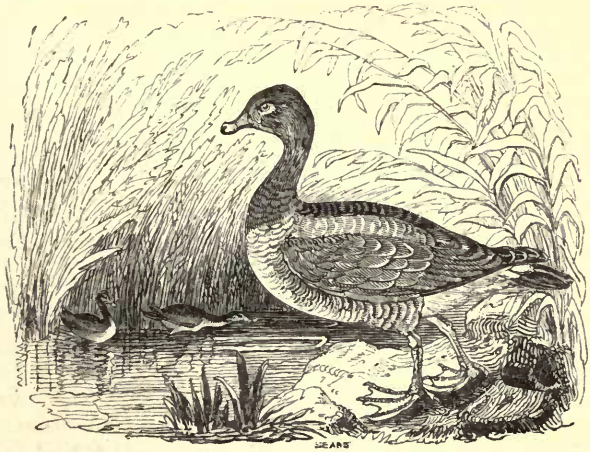
The late Colonel Hardy once had a pack of beagles amounting to ten or twelve couples, and so diminutive in size, that they were always carried to and from the sporting field in a large pair of panniers slung across a horse. This curious pack was lost to the colonel in a rather singular manner. It was kept in a barn which was one night broken open, when all the hounds and the panniers were stolen; and, notwithstanding the most diligent search, no trace of either could ever be discovered.—*Brown.*

Beak, *s.* The bill or horny mouth of a bird.

Bean, *s.* The common garden bean; the horse bean.

Beans contain but five hundred and seventy parts of nutritive matter, yet they add materially to the vigour of the horse. There are many horses that will not stand hard work without beans being mingled with their food, and these not horses whose tendency to purge it may be necessary to restrain by the astringency of the bean. There is no traveller who is not aware of the difference in the spirit and continuance of his horse if he allows or denies him beans on his journey. They afford not merely a temporary stimulus, but they may be daily used without losing their power, or producing exhaustion. Two pounds of beans may, with advantage, be mixed with the chaff of the agricultural horse, during the winter. In summer, the quantity may be lessened, or the beans altogether discontinued. Beans are generally given whole. This is very absurd; for the young horse, whose teeth are strong, seldom requires them; while the old horse, to whom they are in a manner necessary, is scarcely able to masticate them, swallows many of them whole which he is unable to break, and drops much corn from his mouth in the ineffectual attempt to break them. Beans should not be merely split, but crushed; they will even then give sufficient employment to the grinders of the animal. Some postmasters use chaff with beans instead of oats. With hardly-worked horses they may possibly be allowed; but in general cases, the beans, without oats, would be too binding and stimulating, and would produce costiveness, and probably megrims or staggers.—*The Horse.*

Bean Goose, *s.*



This species differs very little in its general appearance from the grey lag goose, the chief distinction between them being in the bill; which in this is small, much compressed near the end, whitish, and sometimes of a pale red in the middle, and black at the base and nail: the latter is shaped somewhat like a horse-bean, from which it has obtained the name of Bean Goose.

These birds arrive in the fen counties in the autumn, and take their departure in May. They are said to alight in the cornfields, and to feed much upon the green wheat while they remain in England.

They are reported to breed in great numbers in the Isle of Lewis, and no doubt on others of the Hebrides, and also at Hudson's Bay.—*Bewick.*

Bear, *s.* A rough savage animal. *Bearward, s.* A keeper of bears. *Obs.*

Beard, *s.* The hair that grows on the lips and chin; sharp prickles growing upon the ears of corn; a barb of an arrow.

Beast, *s.* An animal distinguished from birds, insects, fishes, and man; an irrational animal, opposed to man. In *forestry*, there are five beasts which are properly beasts of forest, or venery; *viz.* the hart, hind, hare, boar, and wolf.

Beat, *s.* A stroke, or a striking. In sporting phraseology, it means the place or country a man passes over in pursuit of game.

Beat, *v.* To move in a pulsatory manner; to dash, as a flood or storm. To look for game.

Beater, *s.* An instrument with which any thing is beaten; a person attending a sportsman, as in pheasant or cock-shooting, to beat the covers and flush the birds.

Bee, *s.* The insect that makes honey.

Bee-Eater, *s.* (*Merops apiaster*, Linn.) A bird that feeds upon bees. Of this genus only one species is British.—*Montagu.*

Bee-Hive, *s.* The case or box in which bees are kept.

Bees-Wax, *s.* Much used in forming ointment.

Beech, *s.* A tree. *Beechen*, *a.* Consisting of the wood of the beech.

Beef, *s.* The flesh of black cattle prepared for food; an ox, bull, or cow.

Beer, *s.* Liquor made of malt and hops; a useful vehicle for tonics and cordials. When good it is an excellent restorative for a fatigued horse. Heated with spirits and ginger it relieves colic, gripes, &c.

Beet, *s.* The name of a plant.

Beetle, *s.* An insect distinguished by having hard cases, or sheaths, under which he folds his wings; a heavy mallet. Beetles flying about late in an evening often foretel a fine day on the morrow.—*Foster.*

Belladonna, *s.* Nightshade; a powerful narcotic.

Mr. Youatt considers this to have some prophylactic powers against rabies, but particularly when in union with the scutellaria, or skull-cap. He begins "with a drachm ball to a moderate-sized dog, containing two scruples of the scutellaria, and about two and a half grains of the belladonna, to be given night and morning: on the second week two balls are given; on the third, three; and this continued for six weeks." The nightshade is also a general sedative.—*The Horse.*

Bellow, *v.* To make a noise as a bull; to make any loud and violent outcry.

Belly, *s.* That part of the body which reaches from the breast to the thighs, containing the bowels. *Belly-bound*, *a.* Costive.

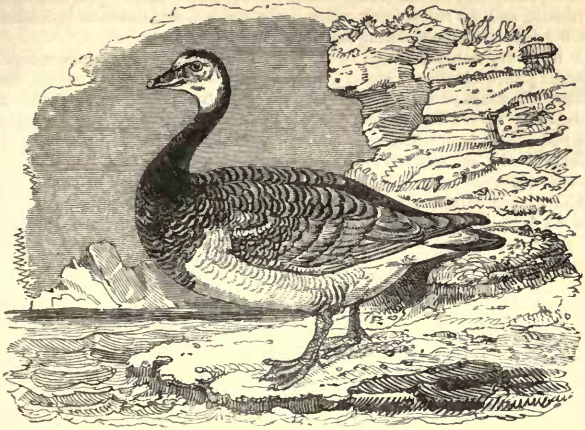
Bellmetal, *s.* The metal of which bells are made.

Belt, *s.* A girdle; a cincture.

Bellwether, *s.* A sheep which leads the flock with a bell hung on his neck.

Benzoin, *s.* Called also Gum Benjamin. It is a yellow resinous substance, and from it *Flowers of Benjamin* are extracted. It is used as an ingredient in Friar's Balsam and Paregoric Elixir.

Bernacle, *s.* A bird like a goose, fabulously supposed to grow on trees.



The Bernacle, (*Anas Erythropus*, Linn. *La Bernacle*, Buff.) weighs about five pounds, and measures more than two feet in length, and nearly four and a half in breadth. The bill, from the tip to the corners of the mouth, is scarcely an inch and a half long, black, and crossed with a pale reddish streak on each side; a narrow black line passes from the bill to the eyes, the irides of which are brown; the head is small, and, as far as the crown, together with the cheeks and throat, white; the rest of the head and neck, to the breast and shoulders, is black; the upper part of the plumage is prettily marbled or barred with blue, grey, black, and white; the feathers of the back are black, edged with white, and those of the wing coverts and scapulars, blue grey, bordered with black near the margins, and edged with white; the quills black, edged a little way from the tips with blue grey; the under parts and tail coverts white; the thighs are marked with dusky lines or spots, and are black near the knees; the tail is black, and five inches and a half long; the legs and feet dusky, very thick and short, and have a stumpy appearance.

In severe winters these birds are not uncommon in this kingdom, particularly on the northern and western parts, where, however, they remain only a short time, and depart early in the spring to their northern wilds, to breed and spend the summer.—*Bewick.*

Better, *s.* One that lays bets or wagers.

Bevy, *s.* A flock of quails.

Bile, *s.* A thick, yellow, bitter liquor, separated in the liver, collected in the gall bladder, and discharged by the common duct; a sore angry swelling.

Bill, *s.* The beak of a fowl; a kind of hatchet with a hooked point.

Billiards, *s.* A kind of play upon a flat surface, with cues, maces, and balls.

In order to play billiards well, attention must be given at first to the method of holding the mace; to the position in which the player should stand, and the manner of delivering the ball from the mace; but these are much more easily acquired by observation or by the direction of a good player, than by any possible written rules. A person who plays with his right hand must stand with his left foot foremost; and on the contrary he who is left-handed must stand with his right foot foremost, by which he will stand more steady and firm. Immoderate bursts of passion, and even fretting at trifling disappointments in the game, are usually found very prejudicial to the player; his nerves,

being affected, it is impossible for him to make the stroke with that steadiness and nicety the game requires.

The games usually played till lately were the white winning and the red winning carambole games, but the winning and losing carambole game is now very fashionable.

The different games of billiards are—

The white winning game, played with two white balls, is twelve in number, when two persons play, and fifteen when four play; scored (independently of forfeitures) from winning hazards only.

The white losing game, also twelve in number, played with two white balls, is the reverse of the winning; the points being scored from losing and double, or winning and losing hazards.

The white winning and losing game is a combination of the two preceding; all balls put in by striking the adversary's ball first, reckon towards the game.

The preceding games should be introductory to the knowledge of those with three or more balls, which are more complicated and difficult.

Choice of balls, in which the player chooses his ball each time, an incalculable advantage, generally played against the losing and winning game.

The bricole game, signifies, being required to strike a cushion, from whence the ball is to rebound so as to hit that of the adversary, reckoned equal to giving eight or nine points. When both parties play bricole, the game is ten, scored from bricole hazards, and forfeitures.

The bar-hole game, so styled because the hole which the ball should be played for is barred, and the player strikes for another hole. When this is played against the common game, the advantage to the last-mentioned is calculated at six points.

One-hole, in which all balls that go into one hole are counted, and the player who best lays his ball at the brink of that particular hole, has the advantage. The lead should be given from that end of the table where the last hazard has been made.

Hazards, so styled as depending entirely upon making hazards, no account being kept of the game. Many persons may play at a table with balls that are numbered, though to avoid confusion seldom more than six play at once. The person whose ball is put in pays a fixed sum for each hazard to the player, and he who misses pays half the same to him whose ball he played at. The only general rule is not to lay any ball a hazard for the next player, which may best be done by always playing upon him whose turn is next, and either bringing his ball close to the cushion, or putting it a distance from the rest.

The doublet game is ten in number, played with two balls, most commonly against the white winning game, and no hazard is scored unless made by a reverberation from the cushion, calculated as equivalent to giving five points.

The commanding game, where the adversary fixes upon the ball which the striker is to play at, reckoned equal to having fourteen points out of twenty-four: usually given by a skilful player against the common game of an indifferent one.

The limited game is very seldom played. In it the table is divided by a line, beyond which, if the striker pass his ball, he pays forfeit.

The red or winning and losing carambole game consists of twenty-one or twenty-four points, reckoned from caramboles, and from winning and losing hazards, equally; both white and red. Each of the white hazards and the carambole counts two; the red hazard three points.

The winning carambole (or red) game is sixteen or eighteen in number, obtained (independently of the forfeitures which every game has peculiar to itself), by winning hazards and carom only.

The losing carambole is nearly the reverse of the winning, and consists of sixteen or eighteen points, made by caramboles, losing and double hazards; counted as in the winning and losing game.

N.B. The simple carambole is only a trifling variation from the above.

The carambole games are played with three balls; one red which is neutral, and termed the *carambole*: the other two white: one of them allotted to each player. The *carambole* is placed upon a spot on a line even with the stringing nail at the bottom of the table, and after leading from the upper end the striker is either to make the winning or losing hazard, according to the particular game, or to hit with his own ball the other two successively; for which stroke, called a *carambole* or *carom*, he obtains two points.

The *Russian carambole* varies from the common carambole in the following particulars:—

The red ball is to be placed upon the usual spot; but the player, at the commencement of the game, or after his ball has been holed, is at liberty to place it where he pleases. The leader, instead of striking at the red ball, should lay his own gently behind the same. and the opponent may play at either of them; if the said opponent play at and hole the red ball, he scores three; then the red ball is to be replaced upon the spot, and the player may take his choice again, always following his stroke till both balls are off the table; he gains two points for every carambole; but if

in doing that he hole his own ball, then he loses as many as otherwise he would have obtained; and if he strike at the red ball, and should carambole and hole that ball and his own, he loses five points; and when he holes all three balls he loses seven, which respective numbers he would have won had he not holed his own ball.

The caroline or *carline game* is played either on a round or square table with five balls, two white, one red, another blue, and the caroline ball yellow. The red ball is to be placed on its usual spot, the caroline ball exactly in the middle of the table, and the blue ball between the two at the lower end of the table. The striking spot is at the upper end, in a parallel line with the three balls. The game is 42, scored from caramboles and hazards; the red hazard counts three, the blue two, and the yellow, when holed in the caroline or middle pocket, is reckoned at six points.

The four game consists of two partners on each side at any of the common games, who play in succession after every winning hazard lost.

The cushion game consists in the striker playing his ball from the top of the baulk cushion, instead of following his stroke upon the table, and is generally played in the winning, or winning and losing game, reckoned equal to giving six points.

Fortification Billiards, for an account of which see Hoyle.

As the *red,* or *winning and losing game,* is that most commonly played, and as its regulations are, with trifling exceptions, applicable to all the others, the following will be found a correct code of the general laws of billiards. For tables of the odds, and a description of particular games, the reader is referred to the later editions of Hoyle.

Rules &c. in the winning and losing carambole game.—1. The game commences by stringing for the lead and choice of balls.

2. In stringing, the striker must place his ball within the striking ring; and, if his adversary desire it, must stand within the limits of the corner of the table.

3. He who, after playing at the bottom cushion, brings his ball nearest to the cushion, at the upper or baulk end of the table, wins the lead, and chooses his ball.

4. After the first person has strung for the lead, if the adversary who follows should make his ball touch the other, he loses the lead.

5. By holing his own ball, either in stringing or leading, the player loses the lead.

6. Should the leader follow his ball, with either mace or cue, beyond the middle hole, it is no lead; and his adversary may make him lead again.

7. The leader must place his ball within the ring, between the striking nails or spots at the upper end of the table: and the same must be observed after every losing hazard has been got.

8. The red ball is to be placed on the lower of the two spots, at the bottom of the table.

9. When either of the white balls has been holed, &c., it must be replaced in, and played from the striking ring, as at the commencement of the game.

10. When the red ball has been holed or forced over the table, it must be replaced on the same spot as at the beginning of the game, and the present striker is bound to see it thus replaced, otherwise he cannot win any points while it is off the spot, and the stroke he may make is deemed foul.

11. If the striker do not hit his adversary's ball, he loses one point; and if by the same stroke he pocket his own ball, he loses three points and the lead.

12. If the striker force either of the balls over the table, he loses the lead.

13. If the striker force his own, or either of the other balls over the table, after having made a carambole or hazard, he gains nothing, and also loses the lead.

14. If the striker hit both the red and his adversary's ball with his own ball, this is called a *carambole* or *carom.*

15. If the striker with his own hole his adversary's ball, he wins two points.

16. If the striker hole the red ball, he wins three points.

17. If the striker hole his own off his adversary's ball, he wins two points.

18. If the striker hole his own off the red ball, he wins three points.

19. If the striker hole both his adversary's and the red ball, he wins five points.

20. If the striker, by playing at the red ball, hole his own and the red ball, he wins six points.

21. If the striker, by hitting the white ball first, hole both his own and the adversary's ball, he wins four points.

22. If the striker, by striking at the red ball first, hole both his own and his adversary's ball, he wins five points: three for holing his own ball off the red, and two for holing the white ball.

23. If the striker play at his adversary's ball first, and hole his own ball and the red, he wins five points: two for holing his own ball off the white, and three for holing the red ball.

24. If the striker play at his adversary's ball, and hole it, at the same time that he pockets both his own ball and the red, he wins seven points: two for holing his own ball off the white, two for holing his adversary's, and three for holing the red ball.

25. If the striker play at the red, and hole his own ball off the same, and the red ball, and his adversary's ball, by the same stroke, he wins eight points: three for holing his own ball off the red, three for holing the red, and two for holing the white ball.

26. If the striker make a carambole, and by the same stroke pocket his adversary's ball, he wins four points: two for the carambole, and two for the white hazard.

27. If the striker make a carambole, and pocket the red ball, he wins five points: two for the carambole, and three for the red hazard.

28. If the striker should carambole, and hole both the red and his adversary's ball, he gains seven points: two for the carambole, two for the white, and three for the red ball.

29. If the striker make a carambole by striking the white ball first, and hole his own by the same stroke, he wins four points: two for the carom, and two for the white losing hazard.

30. If the striker make a carambole by striking the red ball first, and by the same stroke pocket his own ball, he wins five points: two for the carambole, and three for the red losing hazard.

31. If the striker play at the white ball first, and should make a carambole, and also hole his own and his adversary's ball, he wins six points: two for the carambole, and two for each white hazard.

32. If the striker play at the red ball first, and carambole, and should likewise hole his own and his adversary's ball, he gains seven points: two for the carom, three for the red hazard, and two for the white hazard.

33. If the striker should carambole by playing first at the white ball, and also hole his own and the red ball, he wins seven points: two for the carom, two for the white losing hazard, and three for the red winning hazard.

34. If the striker should carambole by striking the red ball first, and at the same time hole his own, and the red ball, he wins eight points: two for the carom, three for the red losing, and three for the red winning hazard.

35. If the striker should carambole by striking the white ball first, and hole his own and his adversary's, and the red ball, he wins nine points: two for the carambole, two for each of the white hazards, and three for the red hazard.

36. If the striker should carambole by striking the red ball first, and by the same stroke hole his own and the red, and his adversary's ball, he gains ten points: two for the carambole, three for the red losing, three for the red winning, and two for the white winning hazard.

37. After the adversary's ball is off the table, and the two remaining balls are either upon the line, or within the stringing nails or spots, at the upper end where the white balls are originally placed in leading, it is called a *baulk;* and the striker, who is to play from the ring, must strike the opposite cushion, to make his ball rebound, so as to hit one of the balls in the baulk—which if he do not, he loses one point.

38. It sometimes happens, after the red ball has been holed or forced over the table, that one of the white balls so occupies its place, that it cannot be put upon its proper spot without touching the same. In such a case, the marker must hold the red ball in his hand, while the striker plays at his adversary's ball, and immediately afterwards replace the red on its proper spot, so that it may not prevent a carambole, &c.

39. If the striker play with the wrong ball, it is a foul stroke.

40. If the striker be going to play with the wrong ball, no person ought to discover it to him, except his partner, when they are playing a double match.

41. If the striker play with the wrong ball, and his adversary should not discover it, he may reckon all the points gained by the stroke, and the marker is obliged to score them.

42. If the striker, after having made a hazard or carom, move with his hand or stick either of the balls which remain upon the table, the stroke is deemed foul.

43. If a ball be found to have been changed during the game, and it is not known by which player, the game must be played out with the balls as they then are.

44. No one has a right to take up or otherwise move a ball, without permission of the adversary.

45. If a striker touch his ball with the instrument twice, the stroke is foul.

46. If a striker be impeded in his stroke by his adversary or a spectator, he has a right to recommence the stroke.

47. If the striker should accidentally move his own ball, without intending at the time to make a stroke, he loses no point; but the adversary may replace the ball.

48. If the striker touch his ball, and make his mace or cue go over or past it, he loses one point.

49. If either of the players, in the act of striking, happen to move his own, the adversary's, or the red ball, from the place it occupied on the table, it is a foul stroke.

50. When the striker's, and either of the other balls are so close as to touch, and in playing the former off, the latter is moved from its place, the stroke is considered foul.

51. If the striker, in attempting a stroke,

do not touch his ball, it is no stroke, and he must strike again.

52. If, when the balls are very near each other, the striker should make his ball touch the other, it is to be considered a stroke, though not intended as such.

53. If the striker play upon a ball which is still running, the stroke is foul.

54. Whoever stops a ball when running, loses the lead; if his adversary do not like the ball he has to play at the next stroke.

55. Whoever retains his adversary's cue or mace, when in the act of striking, makes the stroke foul.

56. If the striker interrupt the course of his own ball, when running towards a hole, after having made a miss, and it is the opinion of the marker that it would have entered the pocket, had it not been interrupted, he loses three points.

57. And if the striker should interrupt, stop, or put his adversary's ball out of its course, when running towards or into a hole, he is subjected to the same forfeiture.

58. If the striker, after having made a hazard, or carambole, interrupt the course of his own ball, the stroke is foul, and he cannot score any of the points he may have thus made.

59. He who blows upon a ball when running makes the stroke foul; and if his own ball were running towards a hole, or near a hole, and he be seen by his adversary to blow upon it, he loses two points.

60. If the striker play with both feet off the ground, the stroke is deemed foul.

61. Whoever strikes the table when the ball is running, makes the stroke foul.

62. If the striker throws his mace or cue upon the table so as to baulk his adversary, he causes him to make a foul stroke.

63. If a ball be made to go extremely near the brink of a hole, and after sensibly standing still, falls into it, the striker wins nothing, and the ball must be put on the same brink where it stood before the adversary makes his next stroke; and if it should fall into the hole at the instant the striker hath played upon his ball, so as to prevent the success of his stroke, the striker's and the adversary's balls must be placed in the same relative position, and the striker play again.

64. He who will not play the game out, loses the same.

65. If a person agree to play with the cue, he is obliged to play with it during the whole of the game or match; but if no agreement have been made, he may at any time change it for the mace, and *vice versâ*. But when the parties agree to play mace against cue, the mace player has no right to use a cue, nor has the cue player any right to use a mace, without permission.

66. When a person agrees to play with a cue, he must play every ball within his reach with the point thereof; and if he should agree to play with the butt of the cue, he has no right at any time to play with the point without permission. Also, when the parties agree to play *point and point* of the cue, neither of them has any right to use the *butt:* but every person who plays with a cue, may use occasionally a long one, and in such case he may play with the point of a long cue or a mace.

67. If the striker should make his mace or cue touch both balls at the same time, it is deemed a foul stroke, and if discovered by the adversary, he wins nothing for any points he might make by the stroke, and the adversary may break or part the balls.

68. Whenever a foul stroke is made, it is at the option of the adversary either to part the balls, and play from the striking ring, as at the beginning, or, if the balls happen to be in a favourable position for himself, to suffer the preceding striker to score the points; which the marker is obliged to do in every case where the balls are not broken.

69. The adversary only is bound to see that the striker plays fair, which, if he neglect, the striker wins all the points he may have made by that particular stroke, and the marker is obliged to score them.

70. No person has a right to discover whether a stroke be fair or foul until asked, unless during a four match; and in that case none but the player or his partner has a right to ask it.

71. Should a dispute arise between the players concerning the fairness of a stroke, the marker alone is authorised to decide, and from his decision there is no appeal: but if he happen to be incompetent, the majority of the disinterested company then present should decide the dispute.

72. Whoever proposes to part the balls, and his adversary agrees, the person who made the proposal loses the lead.

73. No person in the room has a right to bet more than the odds on a hazard or a game; but if he err through ignorance, he should appeal to the marker, or the table of the odds. Each person who proposes a bet should name the precise sum; and also should be extremely careful not to offer a bet when the striker has taken his aim, or is going to strike; and no bet ought to be proposed on any stroke, that may have any tendency to influence the player. If A propose a bet which is accepted by B, it must be confirmed by A, otherwise it is no bet. If any bets be laid on the hazard, and the striker should lose the game by a miss, at the stroke in question, it cannot be a hazard, the game being out by a miss. In all cases the betters are to abide by

the determination of the players, and the betters have a right to demand their money when their game is over.

74. Every person ought to be very attentive, and listen for the stroke, before he opens the door of a billiard-room.

75. The striker has a right to command his adversary not to stand facing or near him, so as to annoy or molest him in his stroke.

76. Each party is to take care of his own game, and his adversary has no right to answer any questions; as, if the ball be close?—if he touch the ball? &c.

77. The marker should make those persons who do not play stand from the table, and give room for the players to pass freely round.

78. Those who play ought to be particularly careful and attentive to their strokes, when any bets are depending thereon: but even should they play carelessly, the bets must, in every case, be decided by the event.

79. No person has any right to discover to the player in what manner he may play his ball. And if it be done, and discovered by the adversary, he may prevent the striker from scoring the points he has made by the stroke. Neither, after a stroke has been played, has any one a right to detect any error the striker may have committed.

* * *

The Dutch Baron.—A few years since the gentlemen of the green cloth were put out of cue, by a hero of the hazard table imported from the continent by one of the squad, who, while he pretended to be playing the losing game, was shrewdly suspected of going snacks in all that rolls into the pocket.

The Dutch baron was introduced by his friend, who happened to have known him at Hamburgh. He played in a crowd of billiard amateurs and professors, many of whom were raw, and lost about one hundred and fifty guineas with the utmost *sang froid.* Upon his retiring, his friend told the company he was a fine pigeon, a Dutch baron, who had emigrated from Holland, with immense property, and who would as readily lose ten thousand pounds as ten guineas. "Who is he?" was eagerly inquired. "A Dutch baron, as rich as a Jew," was answered in a whisper.

No Batavian ever laid out an hundred and fifty guineas so well as the Dutch baron. The whole corps of riflemen flocked around him like a swarm of fish at a piece of bread. But little P——, well known at Bath, who thought he best knew how to make his market, like a man of business, applied to the baron's friend to have the first plucking. The friend, as a great favour, engaged to use his influence; little P—— was at the billiard table the first man in the morning, that he might secure the play in his own hands. The baron came: to it they went; little P—— kept back his play: the Dutch baron played but poorly. Fair strokes he often missed; but whenever he was at an important point he won as if by accident. On they went—Hambletonian and Diamond. Little P—— was afraid of frightening the baron, by disclosing the extent of his play; the baron played so as to persuade every one he knew little of the game. The contest was who should play worst at indifferent periods, and who, without seeming to play well, should play best at important points. The baron won all on great occasions, till little P—— had lost about £100. But the baron managed so well that no one thought he could play at all, and although little P—— was sickened, yet the bait of 150 guineas found plenty of customers. Some of them, the greatest adepts in the kingdom, gave the baron, at starting, three points in the game; but the baron's accidental good play was so superior, whenever a stake was down, he at last gave three points to those who had given him three points, and still beat them—by accident; and before the billiard knowing ones at Bath would stop, the baron had won nearly ten thousand pounds, with which he made a bow, and came to London.

But this Dutch nobleman's fame travelled almost as fast as himself, and he was found out; not, however, till he had sweated some of the most knowing gentlemen of the cue.

He concealed his play so well, that no one could form an idea of its extent. To the best billiard players he gave points, and always won on important occasions. He seemed to be a very conjurer, commanding the balls to roll as he pleased; and there was nothing to be named, that it is not supposed he could accomplish.

And who was the Dutch baron? In Hamburgh, he was the marker at a billiard table! —*Hoyle—Anecdotes of Play.*

BIN, *s.* A place where corn or wine is deposited.

BIPAROUS, *a.* Bringing forth two at a birth.

BIPED, *s.* An animal with two feet.

BIPENNATED, *a.* Having two wings.

BIRD, *s.* A general term for the feathered kind, a fowl.

The term of life varies greatly in birds, and does not seem to bear the same proportion to the time of acquiring their growth, as has been remarked with regard to quadrupeds.

Most birds acquire their full dimensions in the course of a few months, and are capable of propagation the first summer after they are hatched. In proportion to the size of their bodies, birds possess more vitality, and live longer, than either man or quadrupeds: notwithstanding the difficulties which arise in ascertaining the age of birds, there are instances of great longevity in many of them. Geese and swans have been known to attain to the age of seventy and upwards; ravens are very long-lived birds—they are said sometimes to exceed a century; eagles are supposed to arrive at a great age; pigeons are known to live more than twenty years; and even linnets, and other small birds, have been kept in cages from fifteen to twenty years.

* * *

Every part of their frame is formed for lightness and buoyancy; their bodies are covered with a soft and delicate plumage, so disposed as to protect them from the intense cold of the atmosphere through which they pass; their wings are made of the lightest materials, and yet the force with which they strike the air is so great, as to impel their bodies forward with astonishing rapidity, whilst the tail serves the purpose of a rudder, to direct them to the different objects of their pursuit. The internal structure of birds is no less wisely adapted to the same purposes: all the bones are light and thin, and all the muscles, except those which are appropriated to the purpose of moving the wings, are extremely delicate and light; the lungs are placed close to the back-bone and ribs, the air, entering into them by a communication from the wind-pipe, passes through, and is conveyed into a number of membranous cells which lie upon the sides of the pericardium, and communicate with those of the sternum. In some birds these cells are continued down the wings, and extended even to the pinions, thigh-bones, and other parts of the body, which can be filled and distended with air at the pleasure of the animal.—*Vide* Air Cells.

* * *

It seems evident that this general diffusion of air through the bodies of birds is of infinite use to them, not only in their long and laborious flights, but likewise in preventing their respiration from being stopped or interrupted by the rapidity of their motion through a resisting medium. Were it possible for man to move with the swiftness of a swallow, the actual resistance of the air, as he is not provided with internal reservoirs similar to those of birds, would soon suffocate him.

* * *

The migration of birds would appear miraculous, did we not know their extraordinary power of flight. Speaking of this, Bewick says—"If we can suppose a bird to go at the rate of only half a mile in a minute, for the space of twenty-four hours, it will have gone over, in that time, an extent of more than seven hundred miles, which is sufficient to account for almost the longest migration; but, if aided by a favourable current of air, there is reason to suppose that the same journey may be performed in a much shorter space of time. To these observations we may add, that the sight of birds is peculiarly quick and piercing; and from the advantage they possess in being raised to considerable heights in the air, they are enabled, with a sagacity peculiar to instinctive knowledge, to discover the route they are to take, from the appearance of the atmosphere, the clouds, the direction of the winds, and other causes; so that, without having recourse to improbable modes, it is easy to conceive, from the velocity of their speed alone, that most birds may transport themselves to countries lying at great distances, and across vast tracts of ocean." * * *

In speaking of the flight of birds, Mr. Rennie says—"Their capability of performing flights much longer than there is any necessity for supposing, may be proved by numerous facts. Even a sparrow has been calculated to fly at the rate of not less than thirty miles an hour, and many experiments prove that the eider duck can fly ninety miles in the same time. The common kite (*falco milvus*) has been observed to pass, without great exertion, over a space of a quarter of a league, in a minute; and it could fly, with ease, from Cape Pruth to the Land's End, in a single day. M. Audubon, the distinguished ornithologist, has shot the passenger pigeon of America, and on dissection, found its stomach full of fresh rice, which, to have resisted the digestive process, must have been swallowed *not many hours* preceding its death, but could not have been obtained within eight hundred miles of the place where it was killed. Though the nightingale, the willow-wren, and other birds of passage, fly with only half the swiftness, they may easily arrive in most parts of the south of Europe, or the north of Africa, in a few days.—*Bewick—Rennie—Montagu.*

Bird, *v. obs.* To catch birds.

Birdbolt, *s.* A small arrow with three heads, which was anciently discharged at birds from a cross-bow.

BIRD-CATCHER, *s.* One that makes it his employment to take birds.

BIRD-CATCHING, *s.* The act of taking birds or wild fowl, whether for food, for the pleasure of their song, or for their destruction, as being pernicious to the husbandman, &c. The methods are by birdlime, nets, decoys, &c. See BIRDLIME, DECOYS, NETS, &c.

In the suburbs of London there are many persons, who, during the months of October and March, get their livelihood by an ingenious, and we may add, a scientific, method of bird-catching, which is totally unknown to other parts of Great Britain. The reason of this trade being confined to so small a compass, arises from there being no considerable sale for singing birds except in the metropolis; and as the apparatus for their purpose is heavy, and must be carried on a man's back, it prevents the bird-catchers going to above three or four miles' distance. This method of bird-catching must have been long practised, as it is brought to a most systematic perfection, and is attended with very considerable expense. The nets are a most ingenious piece of mechanism, are generally twelve yards and a half long, and two and a half wide; and no one, till he becomes eye-witness of the puller's success, would imagine that a bird, which is so very quick in all its motions, could be caught by the nets flapping over each other. The wild birds fly, as the bird-catchers term it, chiefly during the month of October, and part of September and November, as the flight in March is much less considerable than that of Michaelmas. The several species of birds do not make their appearance precisely at the same time during the months of September, October, and November. The pipet, a small species of lark, but inferior to the others in singing, for example, begins to fly about Michaelmas, and then the woodlark, linnet, goldfinch, chaffinch, greenfinch, and other birds of flight, succeed; all of which are not easily caught, or in any numbers at any other time, and more particularly the pipet and the woodlark. These birds, during the Michaelmas and March flights, are chiefly on the wing from day-break to noon, though there is afterwards a small flight from two till night, but this is so inconsiderable, that the bird-catchers take up their nets at noon. It well deserves the attention of the naturalist whence these periodical flights of certain birds arise. As the ground, however, is ploughed during the months of October and March for sowing the winter and spring corn, it should seem that they are thus supplied with a profusion both of seeds and insects, which they cannot so easily procure at any other season. It has been observed, too, that, during their sitting, they fly always against the wind; hence, there is great contention amongst the bird-catchers, who shall gain that point. If, for example, it is westerly, the bird-catcher who lays his nets most to the east, is sure almost of catching every thing, provided his call birds are good; a gentle wind to the south-west generally produces the best sport. The bird-catcher generally carries with him five or six linnets, of which more are caught than any other singing-bird, two goldfinches, two greenfinches, one woodlark, one redpole, a yellow hammer, titlark and aberdevine, and perhaps a bullfinch; these are placed at small distances from the nets, in little cages. He has besides what are called slur-birds, which are placed within the nets, are raised upon the slur, and gently let down at the time the wild bird approaches them. The slur is a moveable perch to which the bird is tied, and which the bird-catcher can raise at pleasure by means of a long string fastened to it. The slur-birds generally consist of the linnet, goldfinch, and greenfinch, which are secured to the slur by what is called a brace, which secures the bird without injuring the plumage. It is a sort of bandage, formed of a slender silken string, fastened round the body, and under the wings, so as to hinder the bird from being hurt, let it flutter ever so much. As it has been found that there is a superiority in birds that are in song, the bird-catchers contrive that their call-birds should moult before the usual time. They therefore, in June or July, put them into a box, quite close under two or three folds of blankets, and leave their dung in the cage to raise a greater heat, in which state they continue, being perhaps examined but once a week to have fresh water. As for food, the air is so putrid, that they eat little during the whole state of confinement; which lasts about a month. The birds frequently die under the operation, and hence the value of a stopped bird, as the bird-catchers style it, rises greatly. When the bird has thus prematurely moulted, he is in song whilst the wild birds are out of song, and his note is louder and more piercing than that of a wild one; but it is not only in his note he receives an alteration, the plumage is also improved. The black and yellow in the wings of the goldfinch, for example, become deeper and more vivid, and acquire a beautiful gloss, which is not to be seen in the wild bird. The bill, which, in the latter, is black at the end, in the stopped bird becomes

white and more taper, as do its legs; in short, there is as much difference between a wild and a stopped bird, as there is between a horse kept in body-clothes, and one at grass. When the bird-catcher has laid his nets, he disposes his call-birds at proper intervals. There is a most malicious joy in these call-birds, to bring the wild ones into the same captivity, which may likewise be observed with regard to decoy ducks. (*See* Decoy.) Their sight and hearing infinitely excel those of the bird-catcher. The moment they see a hawk they communicate the alarm to each other by a plaintive note, nor will they then jerk or call though the wild birds are near. But at any other time, the instant that the wild birds are perceived, notice is given by one to the rest of the call-birds, as by the first hound that hits on the scent, to the rest of the pack, after which follows the same sort of tumultuous joy. The call-birds, while the bird is at a distance, do not sing as a bird does in a chamber; they invite the wild ones by what the bird-catchers call short jerks, which, when the birds are good, may be heard at a great distance. The ascendancy by this call is so great, that the wildest bird is stopped in his flight; and, if not a sharper, as the bird-catchers style a bird acquainted with the nets, lights boldly within twenty yards perhaps of three or four bird-catchers, on a spot which, otherwise, it would not have taken the least notice of. Nay, it frequently happens, that if only half a flock are caught, the remainder will immediately after light in the nets, and share the same fate, and should only one bird escape, that bird will suffer itself to be pulled at till it is caught, such a fascinating power have these call-birds.

Here it is worth mentioning, that the bird-catchers frequently lay considerable wagers whose call-bird can jerk the longest, as that determines the superiority. They place them opposite to each other, by an inch of candle, and the bird who jerks the oftenest before the candle is burnt out, wins the wager. There have been instances of a bird giving 170 jerks in a quarter of an hour; and of a linnet, in such a trial, persevering in its emulation till it swooned from the perch. Birds, when near each other, and in sight, seldom jerk or sing. They either fight, or use short and wheedling calls; the jerking of these call-birds, therefore, face to face, is a most extraordinary instance of contention for superiority in song.

Various methods are used to catch different kinds of birds. The bullfinch, though not properly a singing bird, or a bird of flight, as it does not move farther than from hedge to hedge, yet, as it sells well on account of its learning to whistle tunes, and sometimes flies over where the nets are laid, the bird-catchers have often a call-bird to ensnare it, though most of them can imitate the call with their mouths. It is remarkable that the female bullfinch answers the purpose of a call-bird as well as the male, which is not experienced in any other species of bird taken by the London bird-catchers. The nightingale is not a bird of flight, in the sense in which the bird-catchers use the term. Like the robin, wren, and many other singing birds, it only moves from hedge to hedge, and does not take the periodical flights in October and March. Those who catch these birds make use of small trap-nets, without call-birds, and are considered as inferior in dignity to other bird-catchers, who will not rank with them. The arrival of the nightingale is expected by the trappers in the neighbourhood of London, the first week in April; at the beginning, none but cocks are taken, but in a few days the hens make their appearance, generally by themselves, though sometimes with a few males. The latter are distinguished from the females, not only by their superior size, but by a great swelling of their vent, which commences on the first arrival of the hens. They are caught in a net-trap, the bottom of which is surrounded with an iron ring; the net itself is rather larger than a cabbage-net. When the trappers hear or see them, they strew some fresh mould under the place, and bait the trap with a meal-worm. Ten or a dozen have been thus caught in a day. The common way of taking larks (*Vide* Lark) is in the night, with nets called trammels. These are usually made of thirty-six yards in length, and about six yards over, with six ribs of pack-thread, which at the ends are put upon two poles about sixteen feet long, and made lesser at each end. These are to be drawn over the ground by two men, and every five or six steps the net is made to touch the ground, otherwise it would pass over the birds without touching them. When they are felt to fly up against the net, it is clapped down, and then all are safe that are under it. The darkest nights are best for this sport; and the net will not only take larks but all other birds that roost on the ground. In the depth of winter people sometimes take great numbers of larks by nooses of horse-hair. The method is this:—Take 100 or 300 yards of pack-thread; fasten at every six inches a noose made of horse-hair; at every twenty yards the line is to be pegged down to the ground, and so left ready to take them. The time to use this is when the ground is covered with snow, and the larks are to be allured to it by some white oats, scattered all the way among the nooses. They must be taken away as soon as three or four are hung, otherwise the rest will be frightened, but though the others are scared away just where the sportsman comes, they will be feeding at the other end of the line, and the sport may be thus continued for

a long time. Those caught in the day are taken in clap-nets of fifteen yards long, and two and a half broad, and are enticed within their reach by bits of looking-glass, fixed in a piece of a wood, and placed in the middle of the nets, which are put in a quick whirling motion by the string the larker commands; he also makes use of a decoy-lark. These nets are used only till the fourteenth of November, for the larks will not dare to frolic in the air except in fine sunny weather, and of course cannot be inveigled into the snare. When the weather grows gloomy, the larker changes his engine, and makes use of a trammel-net, twenty-seven or twenty-eight feet long, and five broad, which is put on two poles eighteen feet long, and carried by men under each arm, who pass over the field and quarter the ground like a setting dog; when they hear or feel a lark hit the net, they drop it down, and so the birds are taken. Linnæus observes, that the male chaffinches fly by themselves, and in the flight precede the females, but this is not peculiar to them. When the tit-larks are caught in the beginning of the season, it frequently happens that forty are taken and not one female among them, and probably the same would be observed as to other birds (as has been done with relation to the wheatear) if they were attended to. Experienced bird-catchers tell us, that such birds as breed twice a year, generally have in their first brood a majority of males, and in their second, of females, which may, in part, account for the above observation.

Birding-piece, *s.* A gun to shoot birds with; an ancient fowling-piece.

Birdlime, *s.* A glutinous substance spread upon twigs, by which the birds that light upon them are entangled.

Birdlime is prepared in different ways. The best birdlime is made of the middle bark of the holly boiled seven or eight hours in water, till it is soft and tender, then laid in heaps in pits in the ground, and covered with stones, the water being previously drawn from it, and in this state left for two or three weeks to ferment, till it is reduced to a kind of mucilage. This being taken from the pit, is pounded in a mortar, to a paste, washed in river water, and kneaded, till it is free from extraneous matters. In this state it is left four or five days in earthen vessels, to ferment and purify itself, when it is fit for use. It reddens tincture of litmus. Exposed to a gentle heat, it liquifies slightly, swells in bubbles, becomes grumous, emits a smell resembling that of animal oils, grows brown, but recovers its properties on cooling, if not heated too much. The residuum contains sulphate and muriate of potash, carbonate of lime, and alumina, with a small portion of iron.

The mistleto affords a juice superior to that of the holly; and if a young shoot of the common alder be cut through, a stringy juice will draw out in threads, and follow the knife like birdlime, or the juice of the holly.

When birdlime is to be put in wet places, the common birdlime is apt to have its force soon taken away. It is necessary, therefore, to have recourse to a particular sort, which, from its property of bearing water unhurt, is called water birdlime, and is prepared thus: Take a pound of strong birdlime, wash it in spring water till the hardness is all removed; then beat it well, that the water may be well separated, so as not a drop remains; then dry it well, and put it into an earthen pot, add to it as much grease as will make it run, with two teaspoonfuls of strong vinegar, one spoonful of oil, and a small quantity of Venice turpentine; let the whole boil for some minutes over a moderate fire, stirring it all the while; then take it off, and, when there is occasion to use it, warm it, and cover the sticks well with it. This is the best sort of birdlime for snipes, and other birds that frequent wet places.

The most successful method of using birdlime is this:—Cut down the branch of any bushy tree, whose twigs are thick, straight, and smooth. The willow and the birch tree afford the best of this kind. Let all the superfluous shoots be trimmed off, and the twigs all made neat and clean; they must all be well covered with the birdlime, within four inches of the bottom: no part of the bark where the lime should come must be left bare; but it is a nice matter to lay it on properly, for if it be too thick it will give the birds a distaste, and they will not come near it; and if there be too little of it, it will not hold when they come there. When the bush is thus prepared, it must be set up in some dead hedge, or among bushes near the outskirts of a town, or the like, in the spring, for these places are the resort of small birds at that time. If it be used in summer, the bush must be placed in the midst of a quick-set hedge, or in whitethorn trees, near fields of corn; and, in the winter, the proper places are about stacks of corn, hovels, barns, and the like. When the lime-bush is thus planted, the sportsman must stand as near it as he can without being discovered, and with the mouth, or otherwise, make such notes as the birds do when they attack or call to one another. The time of day for this sport is from sunrise to

ten o'clock, and from one to sunset. Another very good method of bringing the birds together is by a stale. A bat makes a very good stale, but it must be fastened so as to be in sight at a distance. An owl is a still better stale, for this bird never goes abroad but it is followed by all the small birds. They will gather together in great numbers about it, and having no convenient place to sit on but the lime-bush, many will be taken. If a living owl or bat is not to be had, the skin stuffed will serve the purpose, and will last twenty years. Some have used the image of an owl carved in wood, and painted in the natural colours, and it has been found to succeed very well.

Birds, Method of Preserving.

Various methods have been attempted for preserving birds from putrefaction, so as to retain their natural form and position, as well as the beauty of their colours and plumage. A good antiseptic for animal substances has been much inquired after, as, for want of it, many curious animals, and birds particularly, from foreign parts, entirely miscarry, and others of the finest plumage are devoured by insects. The following improved method by Dr. Lettsom seems to be the least troublesome, and the most complete. After opening the bird by a longitudinal incision from the breast to the vent, dissecting the fleshy parts from the bones, and removing the entrails, eyes, tongue, and brains, (which in large birds may be extracted through the eye-holes with a surgeon's directar,) the cavities and inside of the skin are to be sprinkled with the powders mentioned below. Glass eyes, which are preferable to wax, are then to be inserted, and the head stuffed with cotton or tow, and a wire is to be passed down the throat through one of the nostrils, and fixed on the breast bone. Wires also to be introduced through the feet, up the legs and thighs, and inserted into the same bone; next fill the body with cotton to its natural size, and sew the skin over it; the attitude is lastly to be attended to, and whatever position the subject is placed in to dry, it will be retained afterwards. The dyeing compound is as follows:—

Corrosive sublimate	¼ lb.
Saltpetre, prepared or burnt	½ lb.
Alum, burnt	¼ lb.
Flowers of sulphur	½ lb.
Camphor	¼ lb.
Black pepper	1 lb.
Tobacco, ground coarse	1 lb.

Mix the whole, and keep it in a glass vessel, stopped close. Small birds may be preserved in brandy, rum, arrack, or first runnings; though the colour of the plumage is liable to be extracted by the spirit. Large sea-fowl have thick strong skins, and such may be skinned; the tail, claws, head, and feet are carefully to be preserved, and the plumage stained as little as possible with blood. The inside of the skin may be stuffed as above. Kuckahu observes, (in the Phil. Trans. vol. ix. p. 319.) that "Baking is not only useful in the fresh preservations, but will also be of very great service to old ones, destroying the eggs of insects; and it should be a constant practice, once in two or three years, to bake them over again, and to have the cases fresh washed with camphorated spirit, or the sublimate solution, which would not only preserve collections from decay, much longer, but also keep them sweet." But Dr. Lettsom remarks that, "Baking is apt to crimp and injure the plumage, unless great care be used, and, therefore, the proper degree of heat should be ascertained by means of a feather, before such subjects are baked." And he prescribes as the best preservative, boxes well glazed; and he adds, "When the subject is to be kept for some time in a hot climate, it should be secured in a box filled with tow, oakum, or tobacco, well sprinkled with the sublimate solution. In Guiana, the number and variety of beautiful birds is so great, that several persons in the colony advantageously employ themselves, with their slaves and attendants, in killing and preserving these animals for the cabinets of naturalists in different parts of Europe. The method of doing this, as related by Mr. Bancroft, (in his Nat. Hist. of Guiana,) is, to put the bird which is to be preserved in a proper vessel, and cover him with high wines, or the first running of the distillation of rum. In this spirit he is suffered to remain for twenty-four or forty-eight hours, or longer, till it has penetrated through every part of his body. When this is done, he is taken out, and his feathers, which are no ways changed by this immersion, are placed smooth and regular. It is then put into a machine, made for the purpose, among a number of others, and its head, feet, wings, tail, &c. are placed exactly agreeable to life. In this position they are placed in an oven, very moderately heated, where they are slowly dried, and will ever after retain their natural position without danger of putrefaction.—*Ency. Lond.*

Biscuit, *s.* A kind of hard, dry bread, made to be carried to sea; a composition of fine flour, almonds, and sugar.

BISHOP, *s.* A cant word for a mixture of wine, oranges, and sugar.

BISHOP, *v.* *To bishop a horse*, is to remove, by filing, the distinguishing marks by which the teeth indicate the age. It was a very common practice some years since, and is still resorted to by low horse dealers. It will, however, by carefully observing other indiciæ of age, be easily detected. See AGE OF HORSE.

BISTORT, *s.* A plant called snake-weed. The roots are a very powerful astringent. It has also styptic properties.

BISTOURY, *s.* A surgeon's instrument, used in making incisions.

BIT, *s.* The iron part of the bridle which is put into the horse's mouth.

BIT, *v.* To put the bridle upon a horse.

BITCH, *s.* The female of the dog kind.

Bitches should be allowed to breed, nor is it good for their health to prevent it; for nature almost invariably punishes extraordinary deviations from her established laws, of which the reproductive system is one of the most important. Breeding, therefore, is so much a healthy and necessary process, that bitches prevented from it rarely remain unaffected by disease. Bitches in heat are very cunning, and often elude all but the greatest vigilance in their attempts to escape in search of a mate; and thus, for want of due caution, many frustrate the hopes of their owners in the desired breed; and many others meet their death by becoming lined by a dog so extremely disproportionate in size that the mothers are found unable to bring forth. Impregnation takes place sometimes at the first copulation, in others not until the second, third, or fourth; and in some cases it has been known, from decided proofs, that impregnation did not ensue until the seventh warding. Dogs should be suffered, therefore, to remain together some days to insure prolific intercourse. It is not easy to detect whether bitches are in pup until the fourth or fifth week after warding; about which time the teats enlarge, the flanks fill, and the belly assumes a fulness and rotundity unnatural to it at others. Pupping usually comes on the sixty-second, sixty-third, or, at farthest, on the sixty-fourth day. A quarter or half an hour, and sometimes a longer time, intervenes between the expulsion of each fœtus.

Dogs are certainly capable of superfœtation; that is, impregnation may take place at more than one warding, and that by distinct mates.

It would appear that this mental impression, which is perhaps usually raised at some period of œstrum, always recurs at that period, and is so interwoven with the organisation even, as to become a stamp or mould for some, if not all, of her future progeny. I had a pug bitch whose constant companion was a small and almost *white* spaniel dog, of Lord Rivers' breed, of which she was very fond. When it became necessary to separate her, on account of her heat, from this dog, and to confine her with one of her own kind, she pined excessively; and notwithstanding her situation, it was some time before she would admit of the attentions of the pug dog placed with her. At length, however, she did so; impregnation followed, and at the usual period she brought forth five pug puppies, one of which was elegantly *white*, and more *slender* than the others. The spaniel was soon afterwards given away, but the impression remained; for at two subsequent litters (which were all she had afterwards) she presented me with a *white* young one, which the fanciers know to be a very rare occurrence.

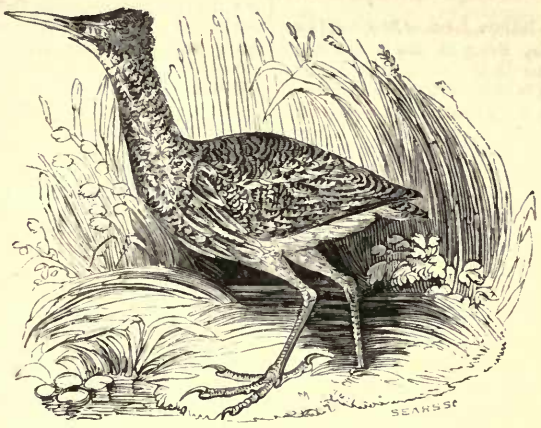
The Rev. R. Lascelles, in his *Letters on Sporting*, p. 250, relates a case of a greyhound bitch, intrusted to the care of a servant, which whelped one perfect greyhound and six complete curs: the curs were the likeness of the dog she domesticated with in common; the single one resembled the greyhound she was taken to during her heat. There is little reason, therefore, to doubt that the bitch had been previously lined by the cur, and the single greyhound pup was the effect of superfœtation.

Sportsmen incline to the opinion, that the male pups are more strongly tinctured with the external form of the father than of the mother, and *vice versâ*; but though instances may occur to favour such a conclusion, it is not a uniform occurrence.—*Blaine.*

BITE, *v.* To crush or pierce with the teeth; to cut, or wound.

BITE, *s.* The seizure of anything by the teeth; the act of a fish that takes the bait; a cheat, a sharper.

Bittern; Bog Bumper; Bittern Bum, or Mire Drum; (*Ardea Stellaris*, Linn.; *Le Buton*, Buff.) *s.* A bird with long legs, which feeds upon fish.



The bittern is nearly as large as the common heron; its legs are stronger, body more plump and fleshy, and its neck is more thickly clothed with feathers. The beak is strong at the base; straight, sharp on the edges, and gradually tapers to an acute point; the upper mandible is brown, the under inclining to green; the mouth is wide, the gape extending beyond the eyes, with a dusky patch at each angle: the irides are yellow. The crown of the head is somewhat depressed, and covered with long black feathers; the throat is yellowish white; the sides of the neck pale rust colour, variegated with black, in spotted, waved, and narrow transverse lines, and on the forepart the ground colour is whitish, and the feathers fall down in less broken and darker lengthened stripes. These neck-feathers, which it can raise and depress at pleasure, are long and loose, and, inclining backwards, cover the neck behind; those below them, on the breast to the thighs, are streaked lengthwise with black, edged with yellowish white: the thighs, belly, and vent, are of a dull pale yellow, clouded with dingy brown. The plumage on the back and wings is marked with black zigzag lines, bars, and streaks, upon a ground shaded with rust colour and yellow. The bastard wings, greater coverts, and quills, are brown, barred with black. The tail, which consists only of ten feathers, is very short; the legs are of a pale green, bare a little above the knees; the claws, particularly those on the hind toes, are long and sharp, the middle ones serrated.

The female is less than the male; her plumage is darker, and the feathers on her head, breast, and neck, are shorter, and the colours not so distinctly marked. She makes an artless nest, composed chiefly of the withered stalks and leaves of the high coarse herbage, in the midst of which it is placed, and lays from four to six eggs, of a greenish white colour.

The bittern is a shy solitary bird; it is never seen on the wing in the day time, but sits, commonly with the head erect, hid among the reeds and rushes in the marshes, where it always takes up its abode, and from whence it will not stir, unless it is disturbed by the sportsman. When it changes its haunts, it removes in the dusk of the evening, and then rising in a spiral direction, soars to a vast height. It flies in the same heavy manner as the heron, and might be mistaken for that bird, were it not for the singularly resounding cry which it utters from time to time while on the wing; but this cry is feeble when compared to the hollow booming noise which it makes during the night time, in the breeding season, from its swampy retreat.

The bittern, when attacked by the buzzard, or other birds of prey, defends itself with great courage, and generally beats off such assailants; neither does it betray any symptoms of fear, when wounded by the sportsman, but

eyes him with a keen undaunted look, and, when driven to extremity, will attack him with the utmost vigour, wounding his legs, or aiming at his eyes with its sharp and piercing bill. It was formerly held in much estimation at the tables of the great, and is again recovering its credit as a fashionable dish.

* * *

The Little Bittern, (*Ardea Minuta*, Linn. *Le Blongois*, Buf.) in size is not much larger than the throstle, measuring only about fifteen inches in length. From the corners of the mouth, a black stroke extends across the under side of the cheeks; and a patch of black, glossed with green and edged with chestnut, covers the crown of its head. On the back, rump, and scapulars, the feathers are dark brown, edged with pale rusty coloured red; the sides of the neck, and the breast are of the same colours, but the brown on the middle of each feather is in narrower streaks. The belly is white: the hinder part of the neck is bare, but the long feathers on the forepart lie back and cover it. The tail is short, and of a black green colour, edged and tipped with tawny: the legs dirty green. The little bittern has seldom been met with in Great Britain.

The above drawing and description were taken from an ill-stuffed specimen in the Wycliffe Museum.—*Bewick.*

Bitumen, *s.* A fat unctuous matter dug out of the earth, or scummed off lakes.

Black, *a.* Of the colour of night; dark.

Black, *s.* A black colour; mourning.

To dye a good black.—First make your stuff a very dark blue: then make a very strong dye of strawall and walnut bark; boil the wool in this for six hours. Take out the stuff, and clean out the dye-pot, and make a fresh dye of *strawall, logwood dust,* or a good quantity of *chips*, with some *madder* and *Brazil dust*: boil in this two hours, and pour off your liquor. Clean your pot, and put in liquor again with the stuff, and when hot, pour in a quart of *urine*, at least eight days' old, and boil in this half an hour. Having dissolved in some of the boiling liquor the size of a hazel-nut of copperas, lift out your stuff, and pour in this liquor—boil it well, and all is done. If any brown or purple should appear between you and the light, put down some clean water, and boil it, adding to it one, two, or three tea spoonfuls of *salt of tartar*, and throw in your stuff for a few minutes. This is a long way for black dyeing, but the best for fishing. Let your dye-pot be large, or it will run over when you add the copperas; keep your dye-pot constantly full of water.—*Ancient Recipe.*

Blackbird, *s.* The name of a bird.

The length of the blackbird, or ouzel, (*Turdus Merula*, Linn.—*Le Merle*, Buff.) is generally about ten inches. Its plumage is altogether black; the bill, inside of the mouth, and edges of the eye-lids, are yellow, as are also the soles of the feet; the legs are of a

dirty yellow. The female is mostly brown, inclining to rust colour on the breast and belly; the bill is dusky, and the legs brown; its song is also very different, so that it has sometimes been mistaken for a bird of a different species.

The males, during the first year, resemble the females so much, as not easily to be distinguished from them; but, after that, they assume the yellow bill, and other distinguishing marks of their kind. The blackbird is a solitary bird, frequenting woods and thickets, chiefly of evergreens, such as holly, pines, firs, &c., especially where there are perennial springs, which together afford it both shelter and subsistence. Wild blackbirds feed on berries, fruits, insects, and worms; they never fly in flocks like thrushes; they pair early, and begin to warble nearly as soon as any other of the songsters of the grove.

The female builds her nest in bushes, or low trees, and lays four or five eggs, of a bluish green colour, marked irregularly with dusky spots. The young birds are easily brought up tame, and may be taught to whistle a variety of tunes; for which their clear, loud, and melodious tones are well adapted. They are restless and timorous birds, easily alarmed, and difficult of access. But Buffon observes, that, "they are more restless than cunning, and more timorous than suspicious, as they readily suffer themselves to be caught with bird-lime, nooses, and all sorts of snares. They are never kept in aviaries; for, when shut up with other birds, they pursue and harass their companions in slavery unceasingly: for which reason they are generally confined in cages apart. In some counties of England, this bird is called simply the Ouzel.—*Bewick.*

Blackcap, *s.* A small singing bird.

Black Cock, *s.* (*Tetrao tetrix*, Linn.) Known also as the heath-cock and heath-poult.

This species sometimes weighs as much as four pounds; length about twenty-three inches, bill dusky, irides hazel; the head, neck, and whole body, are of glossy blue-black, particularly about the neck, breast, and rump; over the eye the bare scarlet skin is granulated; the coverts of the wings dusky brown, the four first quill feathers black, the next white at the bottom, the lower half and tips of the secondaries white, under wing coverts white; the thighs are dark brown, sometimes marked with a few white spots; the tail consists of sixteen black feathers; the exterior ones bend outwards, and are much longer than those in the middle, which makes the tail very forked; the under tail coverts pure white; legs covered with hair-like feathers of a dark brown, speckled with grey; toes pectinated.

The female weighs about two ponnds; the plumage is very different from that of the male; the general colour is ferruginous, barred and mottled, with black above, the under parts paler, with dusky and brown bars; the tail-feathers are straight and even at the end, variegated with ferruginous and black.

The black grous is at present confined to the more northern parts of this kingdom, population and culture having driven them from the south, except in a few of the more wild, uncultivated parts; in the New Forest in Hampshire, Dartmoor and Sedgmoor in Devonshire, and the heathy hills in Somersetshire, contiguous to the latter. It is also found in Staffordshire, and in North Wales, and again in the North of England; but no where so plentiful as in some parts of the highlands of Scotland. The males are polygamous, and fight desperately for the females.

In the month of April the male places himself on an eminence as soon as it is light in the morning, crows and claps his wings, on which the females resort to his station. After the courting season the males associate peaceably together, in small packs; are fond of woody, heathy and mountainous situations; but will occasionally visit the corn-fields in the autumn, retiring almost wholly to the woods in the winter, and perching on trees.

The female lays six or seven dirty-white eggs, blotched with rust-colour, about the size of those of a pheasant. These are deposited amongst the highest heath, without much appearance of a nest.

The young follow the female for some time. The males are scarcely distinguishable from the other sex till they are above half grown, when the black feathers begin to appear first about the sides and breast. Their food is chiefly the tops of heath and birch, except when the mountain berries are ripe, at which time they devour bilberries and cranberries most voraciously.

A supposed hybrid bird of this species has been described under the following synonimes:—

Tetrao Hybridus, Tetra Tetrix, Spurious Grous.

This bird has been described by Linnæus and others as a distinct species, or mixed breed between the black and wood grous. It is said to differ from the black grous in having reddish spots on the neck, breast, wings, and thighs, and in being of a superior size. It is said to have been formerly met with in Scotland.—*Montagu.*

Black-tail, *s.* The ruff or pope; a small fish.

Bladder, *s.* That vessel in the body which contains the urine; a blister, a pustule.

Blade, *s.* The spire of grass; the green shoots of corn. The sharp or striking part of a weapon or instrument.

Bladebone, *s.* The scapula, or scapular bone.

Bladed, *a.* Having blades or spines.

Blain, *s.* A pustule, a blister.

Blank, *s.* A void space.

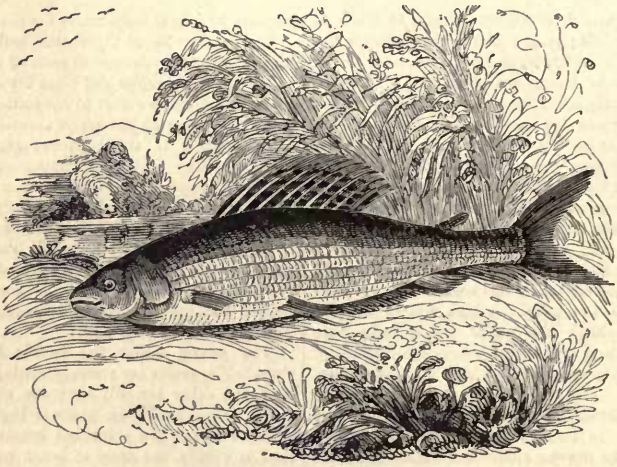
Blank-day, *s.* A sporting term, used when a cover is drawn without success. It is also applied when shooters are kept in-doors by severity of weather, tired dogs, &c.

Blay, *s.* A small whitish river-fish; a bleak.

Blaze, *s.* A flame, the light of the flame; a white mark upon a horse.

Blaze, *v.* To blazon; to inflame; to fire.

Bleak, *s.* A small river fish.



The bleak is seldom more than six inches long; the head is small, and the skull transparent; the eyes are large, with a blood coloured spot on the lower side; the irides of a pale yellow; the under jaw the longest; the gills silvery; the body is slender, greatly compressed sideways, not unlike that of the sprat: the back is green; the sides and belly silvery; the fins pellucid; the lateral line rather crooked; the scales are large, and fall off very easily; the tail is much forked.

Some call the bleak the water swallow, on account of its nimbleness in catching flies; they are very restless, their haunts being sometimes in deep still water, at the sides and tails of streams, where the water shelves off, and makes a gentle eddy; at others in the streams, which may be observed by their swimming near the surface, and their very active manner of taking and diverting themselves with small flies, and insects. In angling for the bleak, the tackle must be very fine, with four or five small hooks, so placed above each other as not to entangle, and swimming by the assistance of a small quill float, rather deeper than mid-water, and baited variously, as with a gentle, bloodworm, caddis, the house-fly, (or any fly they are observed at the moment to feed upon,) and a very small bit of red paste, throwing in now and then some malt grains, or chewed

bread, to keep them together; always remembering, wherever ground bait is used, it should be inferior to the hook-baits: thus two or three at a time may be taken, for they are so eager as to leap out of the water at the bait. Should the day be cold and cloudy, a single gentle, or cadis, upon the hook is then best, sunk about two foot under water.

Another way of taking bleak is by whipping from a boat, or the bank-side in fresh streams, with a rod six feet, and a line twice as long, using an artificial black gnat, a fly of a very sad brown colour, or the small dace-flies; they not only yield much sport, but are very instructive to the young fly-fisher.—*Daniel.*

BLEED, *v.* To lose blood; to run with blood; to drop as blood; to let blood.

Bleeding.—This operation is frequently required in the diseases of horses; and if employed seasonably, and to a sufficient extent, is the most efficacious remedy we are acquainted with. When a horse appears dull and heavy, and indifferent about his food, by bleeding we often prevent a fever. If a horse is bled at the commencement of a cold, the complaint generally proves moderate, and of short continuance. In all cases of internal inflammation, or symptomatic fever, bleeding is the most essential remedy, provided the operation be performed at an early period, and the blood drawn in sufficient quantity. In such cases I have often taken away six quarts or more, and repeated the operation the same or the following day when it appeared necessary. By bleeding copiously at first, those formidable diseases are crushed at once; while by suffering them to proceed or become at all violent, which they will do unless this practice is adopted (or if only a small quantity of blood is drawn), they generally prove fatal: nor will bleeding then be of any service.

Bleeding is either general or local: that is, it is done either so as to affect the system in general, or a particular part only. For general bleeding, the jugular or neck vein is most convenient.

When the vein is firmly pressed with the fingers of the left hand, the blood is prevented from descending, and that part of the vein which is above the fingers is considerably distended, and becomes very conspicuous. In this state it may be easily opened with a lancet held in the right hand. The vein will continue to bleed as long as the pressure below is continued.

Farriers bleed with a *fleam*, which, though apparently a clumsy method of operating, is certainly safer than the lancet in unskilful hands. In topical bleeding, a vein is chosen as near as possible to the affected part, or the vessels covering the part are opened: in the inflammation of the eye, for example, it is done by scarifying the inner surface of the eyelid, or by opening a small vein which is easily seen going from the inner corner of the eye towards the nose. I do not think, however, that either of these operations do any good; indeed that of scarifying the eyelids is often, I believe, injurious.

A graduated tin vessel, capable of containing six or seven quarts, is very convenient for the purpose of receiving the blood; every pint being marked on the inside of the vessel, so that the quantity of blood that is taken off may be exactly known. The blood should always be preserved, that we may judge from its appearance of the nature of the disease, and whether it is proper or not to repeat the operation. When it continues fluid a considerable time, it denotes an inflammatory state of the system. Should a whitish or light buff-coloured jelly appear on its surface, after it has coagulated or settled, and should this jelly be of considerable thickness, rather firm, not easily penetrated by the finger, we may be satisfied that the horse's complaint is inflammatory; that bleeding was a proper remedy; and that, if the symptoms continue, the operation may be repeated with advantage: but if the blood coagulates quickly, is uniformly of a dark liver colour, loose and easily broken, with a considerable quantity of water upon its surface, it denotes debility, and shows that the disease arises from a weakness of the system; that instead of *bleeding*, *tonic* and *cordial* medicines are to be employed, with every thing that may tend to restore the animal's strength.

In order to judge correctly by the appearance of the blood, it should be drawn from a large orifice, and not suffered to run down the sides of the vessel which receives it. The first quantity that is drawn should be put aside for examination, and not shaken or disturbed in any way until it has perfectly coagulated.

When bleeding is employed as a preventive, or in any slight complaints, from two to three quarts may be taken off, according to the horse's strength and condition; but in cases of internal inflammation, or fever, a more copious evacuation is necessary.

When horses are taken from camp or grass, and put into warm stables, they are very subject to inflammatory complaints and dangerous fevers: under those circumstances, moderate bleeding now and then will prevent such diseases. Horses that are getting into condition, as it is termed, are liable to similar

disorders, unless moderate bleeding is occasionally employed. I am inclined to believe, however, that it is a bad practice to bleed often upon trifling occasions; it is liable to induce a plethora or fulness of habit, whereby a horse is rendered more susceptible of disease than he would otherwise be. Moderate purging and regular exercise, with a proper regulation of diet and temperature, are fully adequate to the prevention of disease on those occasions; but these are too often neglected.

It has been asserted that it is seldom necessary to pin up the orifice, which is made in the skin by bleeding. I grant there is not often any danger to be apprehended from its bleeding again; but unless it is pinned up, that is, unless the lips of the wound are brought into contact, and kept in that situation, by passing a pin through the edges of the skin, and twisting a little tow round it, as is generally done by farriers, inflammation and swelling will sometimes take place in the wound, and matter will form in consequence. The fleam has been found upon many occasions, particularly for opening the neck vein, a better instrument than the lancet; the latter makes an orifice in the skin, scarcely larger than the vein; and as the horse is generally a little restless, the blood soon gets between the skin and the vein, plugging up the orifice in the latter, and sometimes diffusing itself in the cellular membrane, so as to cause a swelling. The lancet, however, in skilful hands is a neater method, and more convenient for horses that are very shy and difficult to be bled in the common way.

* * *

Dogs may be conveniently bled by the jugular or neck vein, with a fleam, or with a common lancet; but the latter is much preferable. A ligature being put round the lower part of the neck, and the head being held up, the vein will swell and protrude itself on each side of the windpipe, about one inch from it. It will, however, be necessary previously to cut the hair away, if it be very thick; after which, the puncture can be easily made with a lancet, the operator leaning over the dog. Nothing is necessary, in general cases, to stop the bleeding, but to remove the ligature; nor is any pin, plaister, or bandage, requisite for the orifice. When circumstances such as the want of a regular operator, or when the amateur is called on to deplete his own dog suddenly, as in the field, when the means of venesection by the neck are not at hand; in any such case the ear may be punctured, or an incision may be made on the inner side of the flap of it, choosing, if possible, the course of a vein for the puncture, but avoid passing the instrument through the ear. Or the tail may be cut in desperate cases; but, when this is done, it is better to cut off a small piece than to merely make an incision underneath; for I have seen, when this has been injudiciously done, the whole tail in a state of mortification.

The quantity of blood drawn should be regulated by the size of the dog: for a very small dog, one or two ounces are sufficient; for a middling sized dog, three or four ounces; and for a large dog, five, six, seven, or eight ounces, according to the size and strength of the patient, and the nature of the disease he labours under.—*White.—Blaine.*

BLEMISH, *v.* To mark with any deformity; to tarnish.

BLEMISH, *s.* A mark of deformity, a scar.

BLIGHT, *s.* Mildew; anything nipping or blasting.

BLIND, *a.* Without sight, dark; a sconce.

BLINDNESS, *s.* Want of sight; ignorance.

BLINK, *v.* To wink; to see obscurely. A dog is termed *blinked* when rendered useless in the field, from timidity occasioned by alarming him by a shot, severity, or other ill-usage.

BLISTER, *s.* A pustule formed by raising the cuticle from the cutis; any swelling made by the separation of a film or skin from the other parts.

Blisters are medicines that inflame the skin, and cause watery bladders to rise upon its surface: the most useful of this kind is the cantharis, or Spanish fly, (*lytta vesicatoria*) which forms the principal ingredient in all our blisters. There are others, however, which are generally mixed with it as auxiliaries; as hellebore, euphorbium, turpentine, and sublimate.

Blisters are much used in veterinary medicine, and are extremely efficacious in dispersing callous swellings, the consequence of strains, bruises, &c.

In inflammation of parts remote from the surface, they are of great service. When the internal parts of the foot are inflamed, relief is generally obtained by blistering the pastern, provided the subordinate or auxiliary reme-

dies are not omitted, such as paring the sole, soaking the horny part of the foot in warm water, or applying a poultice to it, and giving a dose of physic. When the lungs are inflamed, blistering the sides freely is an excellent remedy, especially when we feel doubtful as to the propriety of further bleeding.

Blistering is employed also for curbs, windgalls, spavins, &c.

Broken knees, unless skilfully treated, leave a callous swelling on the part; for the removal of which, blistering is employed. When blisters are properly made, and free from any caustic ingredients, such as sublimate, vitriolic acid, &c., there is no danger of destroying the hair; and if the first blistering does not prove effectual, it may be repeated until the desired effect is produced.

Before a blister is applied, the hair should be closely cut off, or even shaved off, if the situation of the diseased part will admit of its being done without wounding the skin; but good scissors, or shears, if skilfully used, will answer the purpose sufficiently. If the skin is scurfy it may be washed with flannel, soap, and warm water, and be made perfectly dry before the blister is applied. Blisters are generally employed in the form of ointment, but on some occasions they are preferred of a thinner consistence, or in the form of liniment, or even still thinner or more fluid, and are then named liquid blisters. Though a variety of ingredients are used in blisters, the cantharis or Spanish fly is the best; and if not injured by long keeping, or adulterated, is the only blistering ingredient required for common purposes.

The following formulæ are recommended by Mr. White.

BLISTER OINTMENT.

Hog's lard . .	4 oz.
Oil of turpentine .	1 oz.
Powdered cantharides .	1 oz.—Mix.

Melt the lard by a gradual heat; remove it from the fire, and stir in the turpentine, then add the cantharides, and continue stirring until it is cold. Or,

Hog's lard . . .	6 oz.
Oil of rosemary . .	½ oz.
Oil of origanum . .	2 dr.
Powdered cantharides . .	6 dr.
Solution of sublimate in muriatic acid, one fluid drachm or sixty minims.	

Mix as above.

Or,

Oil of turpentine . .	2 oz.
Sulphuric acid, by weight .	1 oz.

Mix cautiously, under a chimney, or in the open air, and avoid the suffocating vapour which will arise. When perfectly united, add hog's lard, from six to eight ounces, or more, according to the strength required. When a blister is wanted, take two ounces of this ointment, and rub up with it from two to three or four drachms of recently powdered cantharides. This ointment may be made still stronger by the addition of a little calomel or sublimate at the time it is wanted; but the latter must be used only in a small proportion, and with caution, as it is apt to ulcerate the skin, and cause sloughing and a permanent blemish. It should therefore be applied to a small surface only, as in bone spavin or splent. Neither the cantharides nor the calomel, or sublimate, should be kept ready mixed with the above ointment, as it is probable they would undergo some change, and be rendered inert after a little time. The above recipes may be varied by substituting mercurial ointment, oil of bay, or any other unctuous substance for hog's lard, or oil of origanum, for oil of turpentine. And if a more solid form is desired, it may be obtained by the addition of a little bees-wax, suet, or resin.

BLISTERING LINIMENT.

Olive oil . .	4 oz.
Oil of turpentine .	1½ oz.
Oil of origanum .	½ oz.
Recently powdered cantharides.	1 oz.—Mix.

Or.

Olive oil . . .	4 oz.
Oil of turpentine . .	1 oz.
Oil of rosemary, and oil of origanum. .	of each ½ oz.
Solution of sublimate . .	1 dr.
Recently powdered cantharides .	1 oz.

Mix.

LIQUID BLISTER.

Boiling water . .	6 oz. to 8 oz.
Powdered cantharides .	1 oz.

Macerate for twenty-four hours, and then add rectified spirit of wine, four ounces; solution of corrosive sublimate in muriatic acid, one drachm. To be kept well corked for two or three weeks before it is used: it may then be either strained through blotting paper, and used as a transparent tincture, or merely shaken up and employed as it is. The solution of sublimate should be added at the time the blister is used.

Rectified spirit . .	2 oz.
Liquid ammonia . .	2 oz.
Oil of turpentine, origanum, or rosemary (either) .	1 oz.
Powdered cantharides .	6 dr. to 1 oz.

Mix.

After a blister has been applied to the legs or hocks, the litter should be removed, and the horse's head should be confined or tied to the rack, to prevent his rubbing the part with his nose; but this may be done better by putting what is termed a cradle or necklace round his neck; he may then be turned loose into a box and exercise himself, which is very desirable after blistering. It is necessary to keep the cradle on for about a fortnight, as

they are apt to gnaw the part or injure the skin, when the effect of the blister is going off, and an itching only remains.

The following is a convenient method of making a blister, when the other ingredients cannot be obtained:—Take of the blistering plaster, sold by druggists, two ounces, melt or rather soften it by a gentle heat, and mix with it oil of turpentine from half an ounce to one ounce.

* * *

Blistered Heel.—If your heel should become galled by walking in a water, or any other boot, you will immediately remedy the inconvenience by applying a piece of gold-beater's skin, and over that a little court plaster, in order doubly to defend the part. But even in this trifle there is a right and wrong way of going to work. Instead of cutting with scissors, and merely wetting the plaster, let it be for a moment heated by the fire, as well as wetted, being previously stamped with a wadding punch; by which means, from having no angles, or corners, it will stick as fast as your own skin; provided that, when on and dry, you put over it a little cold cream, or any kind of grease, in order to repel the damp.

The application that has been usually recommended to me by surgeons is a diachylon plaster, which, in cold weather, curls up and torments you so much in walking, that you soon become lame again, and then wish the doctor at Jericho. Go to Godfrey's or some other first-rate chemist, in order to get the sticking plaster in perfection, as many a one has poisoned his skin by not having the genuine article.

* * *

I have been prevented by an accident from accompanying the party; and though my wound be "not so deep as a well, nor so wide as a church door," it still renders me *hors de combat.* I blistered, or rather neglected a blistered heel: and the fag of yesterday has so excoriated the surface, as to make it imperative upon me to lie by for a little. Antony engages to effect a perfect cure by to-morrow; and here I remain *tête-à-tête* with the otter-killer.

The old man proceeded skilfully enough; he lanced the blisters, and then applied the cuticle which covers a sheep's kidney, and which is very similar in appearance and effect to what we call "gold-beaters' leaf." This application prevented the heel from being frayed by the stocking. To the remainder of the foot, he rubbed a hot mixture of tallow and whiskey; and his remedy was "the soveireignest thing on earth," for in twelve hours the cure was effected.—*White—Hawker—Blaine—Wild Sports of the West.*

Blister, *v.* To rise in blisters; to raise blisters by some method.

Block, *s.* A short heavy piece of timber; a sea term for a pulley.

In Falconry, a solid piece of wood, shaped like a sugar loaf, with the six upper inches broken off, whereon the hawk perches, being tied to it by the leash, which goes through the last link of a small iron swivel fixed in its side.—*Campbell.*

Blood, *s.* The red liquor that circulates in the bodies of animals.

Blood, *v.* To stain with blood; to inure to blood, as a hound.

In essential characters and properties, blood is the same in all animals: in some, it wants the colouring matter, but it is invariably red in the higher orders, though the intensity of its hue varies with circumstances, the principal instance of which is that afforded between the venous and arterial; where it is, in the former, almost purple, but in the latter a bright scarlet.

The specific gravity of the blood is very differently estimated, it being subject to increase and decrease at different times. Disease and emaciation make it lighter, while in the contrary states, from its more perfect organisation, it is found heavier. If water be estimated at 1000, the specific gravity of blood may be reckoned at 1050; from which it may, however, be increased to 1120. Venous blood is heavier than arterial, as 1052 is to 1049; but these data vary.

The temperature of the blood in the horse is about 100°; in the ox, 102; and in the sheep, 103: but various circumstances tend to increase or decrease it. Arterial blood is usually one or two degrees warmer than venous: Mr. Vines, I believe, rates the difference much higher. Some diseases reduce the heat of the blood, and ardent inflammations are also capable of augmenting it. The quantity that an animal contains, in proportion to his bulk, has been endeavoured to be ascertained: but the results have been various. Very fat animals are found usually to have proportionally less than lean ones; and in those in a state of close confinement, the quantity is found to be smaller than in the wild; but it is evident, that as the calculation must be in a degree imaginary, from that which will remain in the vessels, so the real quantity is not easy to estimate. A medium sized horse has lost forty-four pounds without apparent injury, and most of them will lose one-fifteenth of their total weight before life becomes extinct: it may, therefore, be presumed that it forms one-tenth of the whole: Mr. Percivall thinks one-eighth.

Blood-hound (*Canis Sanguinarius*), *s.* A hound that follows by the scent.

In the darker ages the blood-hound had the fabulous reputation of pursuing naturally with unerring precision, and of taking murderers, robbers, and other depredators, if he were laid on the footsteps of those intended to be pursued, within a certain given time. We, however, cannot give our assent to the character thus ascribed to him, although experience has taught us, that all sorts of hounds may be broken in to follow any kind of scent, when resolutely taught that they are to run on no other.

One of the principal uses in which the blood-hound was employed by our ancestors, was in recovering game that had escaped wounded from the hunter. And he was taught also to pursue felons, which he would do through thickets, and the most secret coverts; and, if they had lately escaped, they were almost certain of being retaken. For this reason there was a law in Scotland, enacting, that whoever denied entrance to one of these dogs, in pursuit of stolen goods, should be deemed an accessory. And they were also much used on the borders, between England and Scotland, which were greatly infested by robbers and murderers; and a tax was laid on the inhabitants for keeping and maintaining a certain number of these animals. The arm of justice is now, however, so effectually extended over Great Britain, and cultivation so general, that there are no secret haunts where villany can be concealed; which renders this part of the services of the blood-hound no longer necessary. In Scotland this dog was called the sleuth-hound. A few of this race are still kept in the royal forests for the purpose of finding deer that have been previously wounded; and even lately they have been employed in tracing deer-stealers, which they do from the blood which issues from the wounds of the animal.

The blood-hound is tall and most beautifully formed, and is usually of a reddish or brown colour, and exceeds in size, weight, strength, and courage, every other variety of hound. He possesses a kind of sagacious, or serious solemn dignity, admirably calculated to impress the marauder with dread and awe; and at one period, when he was destined to a single pursuit, he was kept a stranger to every other. Much care was taken to prevent those dogs from following the sports of the field, and they were scrupulously taught to trace the footsteps of man alone. At the time they were so much in use, deer-stealing was extremely prevalent in Great Britain, which rendered a constant vigilance on the part of park-keepers, necessary; and when necessity required, in their nocturnal watching, to trace a depredator, when once laid upon the scent, they so closely and keenly pursued, that they infallibly traced and discovered the offending party. Somerville finely describes the manner in which these animals pursue the nightly poacher.

* * *

To try whether a young blood-hound was well instructed, a nobleman caused one of his servants to walk to a town four miles from thence. The dog, without seeing the man he was to pursue, followed him by the scent to

the above-mentioned places, notwithstanding the multitude of people going the same road, and of travellers that had occasion to cross it. When the hound came to the chief market-town, he passed through the streets, without noticing any of the people there, till he got to the house where the man he sought was, and there found him in an upper room.

* * *

Blood-hounds were formerly employed by the Spanish chasseurs in the island of Cuba, for hunting down maroons and fugitive slaves. Mr. Dallas thus describes them:—

"The dogs carried out by the Chasseurs del Ré are perfectly broken in, that is to say, they will not kill the object they pursue, unless resisted. On coming up with a fugitive, they bark at him till he stops; they then crouch near him, terrifying him with a ferocious growling, if he stirs. In this position they continue barking, to give notice to the chasseurs, who come up and secure their prisoner; each chasseur, though he can hunt only with two dogs, properly is obliged to have three, which he maintains at his own cost, and that at no small expense. These people live with their dogs, from which they are inseparable. At home the dogs are kept chained, and, when walking with their masters, are never unmuzzled, or let out of ropes, but for attack. They are constantly accompanied with one or two small dogs, called finders, whose scent is very keen, and always sure of hitting off a track. Dogs and bitches hunt equally well, and the Chasseurs rear no more than will supply the number required. This breed of dogs, indeed, is not so prolific as the common kind, though infinitely stronger and hardier. The animal is the size of a very large hound, with ears erect, which are usually cropped at the points; the nose more pointed, but widening very much towards the upper part of the jaw. His coat, or skin, is much harder than that of most dogs, and so must be the whole structure of the body, as the severe beatings he undergoes in training would kill any other species of dog. There are some, but not many, of a more obtuse nose, and which are rather squarer set. These, it may be presumed, have been crossed by the mastiff; but if by this the bulk has been a little increased, it has added nothing to the strength, height, beauty, or agility, of the native breed."—*Brown—Boyle—Dallas.*

Blotch, *s.* A spot or pustule upon the skin.

Blue, *a.* One of the seven original colours.

To dye Blues and Greens.—You must have two pickling crocks that well hold eight quarts each; fill them with clean urine, let them stand for eight days. Pound two ounces of Spanish indigo, separate. Put it into a small flannel bag, each ounce; put a bag into each crock, and carefully squeeze out the indigo; let it stand two or three days; stir it each day, and when you see a shining scum on it, it is in order to work. It will dye feathers, mohair, or hog's fur; any hackles, or fur dyed with this must be brightened with a solution of liquid blue made with boiling water, with a little of the liquid poured into it for each shade.

To make liquid blue.—A pound of the oil of vitriol and an ounce of the best Spanish indigo pounded very fine and sifted; pour the vitriol into a three-pint delft bowl, put the indigo in, and stir it with a clean stick for half-an-hour; add of soft water by little and little one pint, stirring it all the time till the fermentation is over; then bottle it for use. This gives the finest blues and greens, *but they fade;* you are not to touch your blueing vat with any thing that is yellow.

For blues.—You ought to get the finest of whites, and prepare them well; have the urine vat in good order. Stir up the vat, throw in the feathers in as many bunches as you intend to have shades; lift them out now and then to strike the air. When a middling bright blue, take out a bunch; let the second lie in for double the time and more, and air them as directed. When you see a fine full blue, take out another bunch. You may let the third bunch lay in for two or three days; but as soon as you take out each bunch, you should have about six drops of solution blue in a bowl with a pint of boiling water; rinse them well in that, and it will clean them. If you see it wants it, add in a few drops more, and it will still add to the brightness. Put them instantly into cold water, and wash them well. Do the same three or four times; thus you will have fine deep blues, bright and fast.

Powder blues.—Follow the same process, but do not leave them till done; draw and air them every half-hour; and when of a proper colour, have some boiling water, and from four to six drops of solution to rise and brighten them; and if you see it requires it, add a few drops more. Wash, &c., as before.

A very bright blue.—Ground richly with an archill. Wash in stale urine; put your feathers into the urine vat for half-an-hour; take out and air them, and do as with all the rest. Boiling water, solution water, &c.—*Old Recipes.*

Blue-bottle, *s.* A fly with a large blue belly.

BLUENESS, *s.* The quality of being blue.

BLUE-STONE, BLUE VITRIOL, or SULPHATE OF COPPER, *s.* A mild caustic, and, when dissolved, a mild detergent and astringent lotion. By the addition of any of the mineral acids it becomes a strong caustic. When in solution with vinegar and water, it makes a good wash for the foot-rot in sheep. When very weak it may be applied to the eye. It is a tonic used in *diabetes* and *farcy*.

BLUNT, *a.* Dull on the edge or point; not sharp.

BOAR, *s.* The male swine.

BODY, *s.* The material substance of an animal; matter; strength—as, wine of a good body.—The coating or wool of an artificial fly.

BOG, *s.* A marsh, a fen, a morass.

BOLE, *s.* The body or trunk of a tree.

BOLE ARMENIA, *s.* Little used but as an application to ulcers, where the discharge is thin and acrimonious.

BOLT, *s.* An arrow; a dart; a thunderbolt. Bolt upright, that is, upright as an arrow; the bar of a door; an iron to fasten the legs.

BOLT, *v.* To spring out with speed and suddenness. To gib, or diverge from the course.

BOLUS, *s.* A medicine made up into a soft mass larger than pills.

BONE, *s.* The solid parts of the body of an animal.

The bones of birds are nearly all hollow, and communicating with the lungs, are thence filled with air, so as to render them more buoyant for flight. The breast bone (*sternum*) extends much lower than in quadrupeds, and is distinguished by a ridge like the keel of a ship, except in the ostrich, &c., which do not fly. The bones of the wings are similar to the fore-legs of quadrupeds.—*Rennie.*

BOOM, *v.* To rush with violence. To make a noise like a bittern.

BOONK (*Ardea minuta*, LINN.), *s.*

This is a very rare bird, and few instances only are recorded of its being killed in England. A male was shot near Bath, in the autumn of 1789, perched on the stump of a tree on the bank of the Avon. In the month of May, 1808, a female was shot contiguous to the river Creed, and Dr. Fleming tells us that one was shot at Sunda, Orkney, in 1805. It is more frequent in some parts of the European continent, particularly in Switzerland, and, as Temminck informs us, in Holland.—*Montagu.*

BOOT, *s.* A covering for the leg.

All boots for going in the wet, answer much better if kept at least half a year before they are worn; and they should afterwards never be suffered to get too hard. Water boots should be invariably worn over an extra pair of coarse yarn stockings, without which you do not give them a fair trial.

So far from being hard to the feet, they are the softest possible wear, and may be made very light. They should always be made to draw, when required, very far above the knees, in order to protect them from cold or wet.

Various dressings are recommended, though, perhaps, almost any grease may answer; but the first and most effectual application might be tar, tallow, and bees' wax, melted, (not too warm) and then poured into the boots; which, after having this shaken into every part of them, should be hung up to let it run out. By this dressing, and the sacrifice of the first pair of stockings that follows it, we may walk in the river with more comfort than a Bond-street lounger would cross the street after a shower.

This recipe, however, though a double defence, I do not mean to say is absolutely necessary.

As another good recipe, I should prefer the following one:—

RECIPE.

Drying oil . . .	1 pint.
Yellow wax . . .	2 ounces.
Turpentine . . .	2 ounces.
Burgundy pitch . .	1 ounce.

Melt those over a slow fire, and then add a few drachms of essential oil of lavender (or thyme). With this your boots are to be rubbed with a brush, either in the sun, or at some distance from the fire. The application must be repeated as often as the boots become dry again, until they are fully saturated.

Melt three ounces of spermaceti in an earthen vessel, over a slow fire, to which add six drachms of India rubber cut into thin slices, and when dissolved, add eight ounces of tallow, two ounces of hog's lard, and four ounces of amber varnish, which, when well mixed, is fit for immediate use. Two or three coats applied with a common shoe-brush makes the leather water-proof, and produces a polish equal to the best puffed-off blacking in the kingdom.

* * *

Fishermen use a preparation for their boots, of bees-wax, burgundy pitch, and clean turpentine, each two ounces, clear rendered tallow, four ounces, all melted together, and applied over a weak flame until the leather fills; the boots should be perfectly dry before being liquored, and apply the liquor by degrees so that one portion may be dried in, before another is laid on.

* * *

The following is an approved recipe:—If the boots are new, half a pound of bees wax, a quarter of a pound of rosin, and the like quantity of mutton suet or tallow; boil them up together, and anoint the boots well with the preparation luke-warm. Should the boots have been used, beef suet is to be substituted for the mutton.—*Hawker—Sport. Mag.*

BOOT OF A COACH, *s.* The place under the coach-box.

BOOT-HOSE, *s.* Stockings to serve for boots.

BORAX, *s.* An artificial salt, prepared from sal ammoniac, nitre, calcined tartar, sea-salt, and alum, dissolved in wine.

Borax is sometimes applied in a solution of water to the mouths of young horses when cutting teeth, but alum is cheaper and more effectual.

BOTT, *s.* Small worms in the entrails of horses.

BOTTLE, *s.* A small vessel of glass, or other matter; a quantity of wine usually put into a bottle—a quart; a quantity of hay or grass bundled up.

BOTTOM, *s.* The lowest part of any thing; the ground under the water; a ball of thread wound up together. The constancy or durability of a man, horse, or dog.

BOUND, *s.* A limit, a boundary; a leap, a jump, a spring.

BOUND, *v.* To jump, to spring.

BOURGEON, *v. obs.* To sprout, to shoot into branches.

BOW, *s.* To bend, or incline, in condescension.

BOW, *v.* An instrument of war, or of the chase; a rainbow; the instrument with which stringed instruments are played upon.

The *cross-bow* is an instrument of great antiquity, formerly used in projecting bolts or short arrows, for which, in modern times, bullets have been substituted.

Rooks, although pertaining to no species of game, yet the custom of shooting them being adopted by many gentlemen who use the cross-bow for that purpose, and since upon the proper regulation of this instrument, the whole of its execution depends, directions are therefore here given to render it useful.

Cross-bows employed formerly as weapons in war, and also to kill animals in the field, (where great nicety of vision was required, to find those sorts of game that kept upon the ground, for the cross-bow was always used at motionless objects), were of somewhat the shape as those of the present day, at least those that now throw what is termed a bolt. The bullet-bows are of modern and much neater construction, and their accuracy, when once set, is astonishing; the splitting a ball upon the edge of a knife, however extraordinary it may sound, is to be performed by a novice, at a dis-

tance of from fifteen to twenty yards, and the bow, once regulated, will throw the ball with the same unerring certainty for fifty times successively.

Directions.—When shooting where the trees are lofty, try the bow at fourteen yards upon a level, stopping all the holes in the sight but one; if it shoots too high, raise the bead higher on the fork; if too low, the contrary: should it carry to the right, turn the bead round to the right; if to the left, the contrary.

When the ball does not come within the notches of the fork, open another hole in the sight; if it shoots too high, open one lower; if too low, the reverse.

Should the spring within the lock happen to fail, take care to place the open part of the new one toward the butt end of the bow; if it be put in the wrong end forward, the bow will be useless.

Never keep the bow long in full tension, rather shoot the ball waste.

If the string frets or unravels, close up the defective places with bees-wax.

Care is necessary to hold the bow steady in charging; if let slip whilst drawing up the string, it will assuredly break the stock, and probably the lath and string at the same time.—*Daniel.*

Bowels, *s.* Intestines, the vessels and organs within the body; the inner parts of anything.

The bowels of the dog are very frequently disordered. Dysentery, as an idiopathic affection in dogs, is very rare; but an irritation productive of morbid and inordinate mucous discharge is produced by various causes. A principal one is the consequence of long-continued diarrhæa, which is so common to distemper. Another is the result of bilious inflammation. A third cause is the introduction of poisons. Super-purgation will bring it on, as noticed with enteritis and diarrhæa: the presence of worms will likewise occasion it.—See Worms.

Bowl, *s.* A vessel to hold liquids; the hollow part of anything; a basin; a fountain. A round mass rolled along the ground.

Bowl, *v.* To play at bowls; to throw bowls at anything. Bowler, *s.* He that plays at bowls.

Bowling-green, *s.* A level piece of ground, kept smooth for bowlers.

Bowman, *s.* An archer.

Bowstring, *s.* The string by which the bow is kept bent.

Bowyer, *s.* An archer; one whose trade is to make bows.

Box, *s.* A tree; the wood of it. A case made of wood, or other matter, to hold any thing.

"A tin box is sometimes preferred for carrying fly tackle, as the flies are not pressed in it, as they are in the book."—*Daniel.*

Brace, *v.* To bind, to tie close with bandages; to strain up.

Brace, *s.* Cincture, bandage; that which holds anything tight. Braces of a coach, thick straps of leather on which it hangs.

Brach, *s.* A bitch hound.

Brachial, *a.* Belonging to the arm.

Brag, *s.* A game at cards.

Brag is not so much in vogue as formerly; it is played with a whole pack of cards, and rather variously conducted by different parties, but the following is given as one of the most scientific methods:—As many persons as the cards, leaving a few for stock, will supply, may play at a time, all of whom are to lay down three stakes a piece, one for the best whist card turned up in the deal; the second for the best brag-hand, and the third for the eldest hand obtaining thirty-one, or the next number under that. The dealer is to give three cards at once to every player turning up, all round, the last card belonging to each player, and the best card reckoning from ace downwards amongst those so turned up, wins the first stake; if two or more superior cards of a sort be turned up, the eldest hand, of

course, has the preference, except in case of the ace of diamonds, which at this part of the game takes place of every other.

The second stake is won by the person possessing the best brag-hand, or often rather by the boldest bragger, who sometimes only pretends to hold good cards, such as pairs, flushes, sequences of flushes, and so on, similar to cribbage, excepting fifteens. In this state of the game there are usually two favourite cards; viz. the knave of clubs and the nine of diamonds, which are reckoned with any others to form pairs-royal or pairs; that is, the two favourites combined together with one, or either of them with two aces, kings, &c., are styled a pair royal of such cards, or singly, either of the favourites with another card ranks as a pair; only natural pairs-royal are to precede artificial ones, as three aces, kings, &c., take place before a pair-royal, formed by assistance of the two favourites, though a natural pair does not supersede an artificial one made by the help of a favourite, into which situation only the knave of clubs is admitted by some companies. The principal sport of the game is occasioned by any player *bragging* that he holds a better hand than the rest of the party, which is declared by saying, *I brag*, and staking a sum of money; if no one answer by a similar or larger deposit, then the bragger wins the second stake; but should any one reply, either by putting down the same or a greater sum, and the first bragger decline the contest, the answerer then takes both the money put down and the second stake: should the first bragger go on, and he says *Again*, and ventures another sum, whether similar to that laid down by the opponent or not, is of no consequence, provided it is not smaller; and if the other should reply in like manner *again*, the parties continue betting, each putting down a sum not less than that last ventured by his adversary, till one or other of them, frightened, gives up the contest, by which the player holding out longest gains all the money wagered, including the second stake; or either party may lay down a stake, saying, *Let me see you*, or *I'll see it*, in which case both the hands are to be shown, and the strongest wins. When more than one person wishes to answer the first bragger, the eldest has the preference.

The third stake is obtained by the eldest player, who may hold, either from the cards dealt, or obtain by drawing in addition from the stock, thirty-one, or the highest number under that; each ace, king, queen, and knave being calculated as ten, and the rest according to their pips; any one drawing above thirty-one loses of course.

The player who is so fortunate as to gain all the three stakes in one deal, is, strictly speaking, entitled to three more from each of his antagonists, though in some companies this is declined, as savouring too much of gambling.—*Hoyle.*

Brake, *s.* Fern, brambles. A carriage for training horses.

Braky, *a.* Thorny, prickly, rough.

Bramble, *s.* Blackberry-bush, dewberry-bush, raspberry-bush; any rough prickly shrub.

Brambling, *s.* A bird, called also the mountain chaffinch. A small worm.

Bran, *s.* The husks of corn ground.

Branch, *s.* The shoot of a tree from one of the main boughs; any distinct article; any part that shoots out from the rest; a smaller river running into a larger. The offspring, the descendant; the antlers or shoots of a stag's horn.

Branch, *v.* To spread in branches, to spread into separate parts; to have horns shooting out.

Brancher, *s.* One that shoots out into branches. In Falconry, a young hawk. A young rook.

Brand, *s.* A stick lighted, or fit to be lighted; a mark made by burning with a hot iron.

Brandling, *s.* A particular worm.

Brandy, *s.* A strong liquor distilled from wine.

Brank, *s.* Buckwheat.

BRASIL, or BRAZIL, *s.* An American dye-wood, commonly supposed to have been thus denominated, because first brought from Brasil.

BRASS, *s.* A yellow metal made by mixing copper with lapis calaminaris; impudence.

BRAWN, *s.* The fleshy or muscular part of the body; the arm, so called from its being muscular; bulk; muscular strength; the flesh of the boar; a boar.

BRAWNER, *s. obs.* A boar killed for the table.

BRAY, *v.* To pound, or grind small. To make a noise as an ass.

BRAZE, *v.* To solder with brass.

BREAD, *s.* Food made of ground corn; corn in general.

BREAK, *v.* To part in two; to bruise by dashing, as waves upon a rock; to open and discharge matter.

BREAKER, *s.* He that breaks dogs.

Breaking Dogs.—There are three kinds commonly used in shooting; the setter, the pointer, and the spaniel. It is not designed in this work to enter into minute directions for breaking them; that is a province few gentlemen choose to undertake, and very properly have their dogs made to understand their business, before they will take them into the field; however, a method will be here concisely mentioned, and which the experience of one, who has broke as many, and as capital dogs as any man of his age, in this or any other country, always led him to adopt.

For breaking a pointer or setter, get a check collar, with a line nearly twenty yards long. Peg the dog down, and give him the word ("Take heed!") or any other, make him drop, and let him lay a quarter of an hour, walking round, and using the word; afterwards walk up and give him a small piece of cheese. Take the dog upon a slack line, drop him, and act as above every morning for a fortnight, until he perfectly knows the word; then hunt him at first single; when on a strong haunt of birds, use the word, and stop him; reward him as above with a piece of cheese, and so encourage him until he knows his game: serve each dog in the same way for fourteen days; then take two or three dogs upon check collars, peg down one before the other, give the word, and make them back each other four mornings successively; afterwards hunt them together.

To teach pointers or setters to bring their game, get a rabbit's skin stuffed; begin by throwing it in a room, and let the dog have a small line on his collar; when he takes up the skin, bring him to you with a gentle pull, with the skin in his mouth; encourage him three or four times, and then take the line off; when the dog begins to enjoy it, take a small line and run it through a pulley fixed at the top of a room; tie the rabbit's skin to one end of the line, keep the other in hand, fire a pistol, and let the skin drop; the dog will soon be fond of the sport, and readily bring every head of game that is shot. Break all the dogs in this way, and then take two or three together into a room, fire the pistol, and order first one, and then another dog, to bring the skin, and they will soon be perfect.

To break a wild spaniel, fasten a wide leather strap, about four feet long, to his collar, with a swivel; this he will tread on, and throw himself over, and will, by that means, soon be checked, and rendered handy and obedient. Spaniels may be taught to bring the game by the same mode of instruction as the pointers or setters; there should, however, be but one spaniel in a team that does this; if more, they will break the game in struggling which shall carry it.

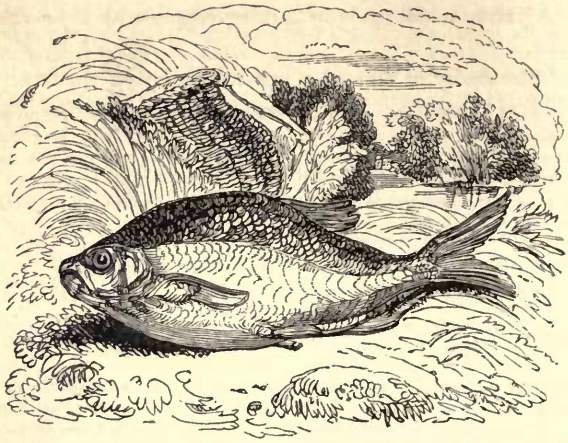
* * *

The keepers in the west of Ireland commonly break their dogs by using a pole of about five feet long perforated with a small bicket, about a foot from the end—to this bicket they affix the *check-collar*, and by pegging the dog down, secure him at his point as long as they please. By reversing the pole when it is necessary to chastise the animal for misconduct, the dog is effectually secured from escape or resistance; and, with this simple apparatus, an Irish breaker will stop the wildest setter, and subdue the most refractory.

* * *

Some sportsmen, however, object to the use of the pole on the score of severity, and allege that timid dogs are frequently blinked by using it. But for a violent setter, nothing will conquer his obstinacy so soon or so effectually as this implement.—*Thornhill, &c.*

BREAM, *s.* The name of a fish.



The bream is a well-known fish, and yields good diversion to the angler; it is found in slow running, deep rivers, but is chiefly met with in extensive ponds, where, although it grows tardily, it will attain the weight of three or four pounds (they have been known to weigh eight), and if the water and air suit him, will get very fat: they are great breeders, for it is observed the melter has two melts, and the spawner two large bags of spawn, from which is deposited upwards of 130,000 ova. Very few wish to stock their waters with them, as they increase so rapidly, as to consume all the sweet feed, and starve other fish, and are only fit to be put into ponds as food for pike, perch, &c.

The bream is broad, with a small head, smooth at the top, big eyes, a small leather mouth, no teeth, but a lozenge-like bone to help its grinding; the palate is soft and fleshy, resembling that of the carp; it is covered with curious net-work scales, on which it sometimes has abundance of minute whitish tubercles; has a hog back, of a colour between blue and black; the sides of the largest are yellowish, and the belly, inclining to red, is extremely deep, and thin in proportion to its length; the tail is very large, and something in the form of a crescent.

The flesh is soft and clammy, yet by some reckoned of easy digestion, and of better nourishment than that of a carp; the choice parts are the belly and head; what renders it unpleasant for the table is the multitude of bones, and the best way of preparing him is by pickling it like salmon. The French, however, esteem this fish highly, and proverbially say, "he that hath breams in his pond is able to bid his friend welcome."

The baits used are the red paste; also paste made of brown bread and honey, gentles, waspings, flag-worms; and they are great lovers of red-worms, especially such as are found at the root of a great dock, and lie wrapt up in a round clue: the common red-worms should be used two small ones at a time. Green flies under water, the grass-hopper with the legs cut off in June and July; but the best bait for the full-grown bream is a large red worm without a knot, which is to be found in garden walks or chalky commons after rain; put the worms with moss well washed and picked, and the water squeezed from it, into an earthen pot set dry; change the moss every four days for three weeks; they will then be clear, lively, and at the best.

The following directions have been generally given for taking the bream, and as being also equally certain of tempting that shy fish the carp. The bait to be a large red worm, the rods long; the lines silk, or silk and hair, and the floats, goose or swan quills; a piece of lead of the form of an upright brass weight, with a hole at the top, is to be fastened to the low end of the lines; then fasten the hook-link also to the lead, allowing ten inches or a foot between lead and hook, which should be No. 4: the lead must be sufficiently heavy to sink the float quite level with the surface, and not for the float to bear up the lead, which must lie on the ground; by which means the worm will crawl up and down so far as the lead will allow, which to the fish is

a great enticement. The line for two yards at bottom should be of strong round gut, and the link next the hook as small as you dare use, for fear of pike or perch (who will assuredly visit the hooks), and till they are taken, neither carp or bream will come near to bite: this fineness will admit the worm to draw the hook to and fro with less difficulty.

For the ground-bait, get a peck, or peck and a half, according to the greatness of stream and depth of water, of sweet gross ground malt, or unground wheat, which is thought preferable; boil it very little, and strain it through a bag: when cold, at night, cast in two parts of it squeezed hard between the hands, so that it may rest in the precise spot where you mean to angle; and if this be repeated for two or three times, it will more certainly attract the fish. Recollect in a stream, to throw it at least a yard above the place where you mean your hook to be, or the stream will carry it too far down; some sew worms for the fish to feed on, upon a turf of short grass, nearly to cover the turf, which is then fastened to a round board, with a hole through that and the turf, where a cord runs, and is tied to a pole to let down to the bottom. Bream generally choose the broadest and deepest part of a river, and in hot weather are easily seen swimming in shoals; there, or thereabouts, with a clear bottom, take the exact depth, making some mark that shall explain if any rise or fall has taken place in consequence of watermills, &c.

The ground thus baited, the worms and tackling prepared, by three or four in the morning, with great caution approach the place, so as not to be seen by the fish; some of them are frequently at the top of the water, whilst the rest are feeding beneath. Having baited the hook that the worm can move at bottom, cast it, and by drawing it gently to you, let the lead rest about the middle of the ground bait; a second rod should be a yard or two above, and a third a yard or two below it; retire from the water so far as just to perceive the top of the floats; when there is a bite the top of the float will sink suddenly; remain quiet until the line goes clear away, then creep to the water-side, and give as much line as possible; if it be a good carp or bream it will go to the farther side of the river, strike gently, and hold the rod at the proper bend, that it may tire him; for if both pull together, either line, hook, or hold, will break, and the fish will be lost. The bream is strong, and runs hard when first struck; but after two or three turns, he will fall on his side, which enables you easily to land him: the carp is far stronger and more mettlesome than the bream; it is advisable to use a reel upon the rods for carp, barbel, or bream; the length of line kills the fish with ease, and increases the angler's amusement.

This sport may be continued from four till eight in the morning, and from four until the same hour in the evening. The following morning, for the same hours, your diversion will be perhaps the best; if it is gloomy and windy, they will bite all day long, especially if the water is a little thick after rains; during the time of fishing, and at that of quitting the water, throw in more of the ground-bait. After two or three days, the place should be baited and left quiet; the fish will otherwise get too cunning to touch the hook-bait.

Another mode of catching the bream, is, after plumbing the depth, put one or more shot a foot below the float, to balance it, which is a way to take the shyest fish; the bait a large red-worm, which must be laid in, and let sink very gradually to the ground-bait. When the fish bites, strike gently that very instant.

A third is the running line, with a bullet and hole through it, and a small shot to hinder the bullet falling on the hook; let this run on the bottom with the current into holes, and eqnally as for the bream, it will be found to answer for all other fish that bite at the bottom.—*Daniel.*

Breast, *s.* The middle part of the human body, between the neck and the belly; the part of a beast that is under the neck, between the fore-legs.

Breath, s. The air drawn in and ejected out of the body; life; respiration.

Breathe, *v.* To draw in and throw out the air by the lungs; to live; to rest; to take breath.

Breech, *v.* To fit any thing with a breech, as to breech a gun.

Breed, *v.* To procreate, to generate; to bring up, to take care of. To bring young; to raise a breed.

Breed, *s.* A cast, a kind, a subdivision of species; progeny, offspring; a number produced at once, a hatch.

BREEDER, *s.* One that produces any thing; a female that is prolific; one that takes care to raise a breed.

Breeding Dogs.—Never breed from an old dog and old bitch; if one party must be aged, it had better be the latter; but age on either side should be avoided if possible.

Winter whelps of all sorts of dogs are best, although the difficulty in rearing the produce and the loss of the use of the bitch for some weeks, are strong reasons against it, in the opinion of many; but the few that survive and are reared, amply recompense these obstacles. At three or four days old, part of the sterns should be twisted off, and the dew claws be cut off with a sharp pair of scissors. Puppies will soon learn to lap milk, which will relieve the mother; at six weeks old they may be separated, and should then be wormed.

The dog, to be complete in his form, should have round small feet, legs strong, straight, and muscular; the shoulders fall properly into the back, not upright; chest let down; loins good; back not too long; elbows play finely in their action, and come well in; thighs and gaskings broad and strong.

* * *

In our selection of parents for multiplying a breed a variety of circumstances should necessarily engage our attention; as, whether we are continuing a race already established, improving a defective one, or altogether forming a new variety. In either case, but particularly in the two latter, one or two propagations are not sufficient to enable us to judge of the merits or demerits of the products: anomalies may occur, monstrosities appear, or dogs may breed *back*. It should likewise be always present to us, that, in despite of all our care, and in face of the most favourable opportunities for selection, still *perfect specimens* to propagate from are unattainable; and as, therefore, we are necessarily to expect defects, it should be our care to well examine that we do not select our male and female parents with each the same faulty form or property; for, however perfect they may be in other respects, they are, in such a case, totally unfit to breed from together. We may, for instance, suppose an otherwise eligible pair of pointers, of the purest blood, but that each, from early and constant confinement, had contracted long, weak, spreading phalanges or toes, instead of a round, cat-like form of foot. By choosing a mate for each of these whose feet were unusually small, round, and firm, we might remedy this defect, and preserve their excellencies; but it would be only propagating deformity to breed from them together. We can only expect to prove successful in rearing a superior race of any domestic animal, when we make our selection of parents with a careful reference to the merits and defects in each, by balancing the one against the other, and by thus combining their different properties. It is by inattention to these circumstances that so many persons, after giving immense prices for animals of particular stocks, have found themselves foiled in their attempts at rearing any thing beyond mediocrity, which animals, under the judicious management of a Russell, a Coke, or an Ellman, among cattle, or an Orford, a Meynell, a Rivers, or a Topham, among dogs, would have produced unrivalled forms.

Breeding In-and-In.—Among the practical and systematic breeders of all domestic animals, and among none more than those sportsmen who devote themselves to the improvement of the dog, a great diversity of opinion has always existed on the subject of *consanguineous breeding*, or of that between near relations, characterised by the term *In-and-In*. The conflicting authorities on the subject are numerous, and the testimonies contradictory; and it is more than probable that they will remain so, until a long course of experiment is undertaken by a body or society of scientific and observant breeders on various domestic animals, for the express purpose of arriving at the truth in this particular.

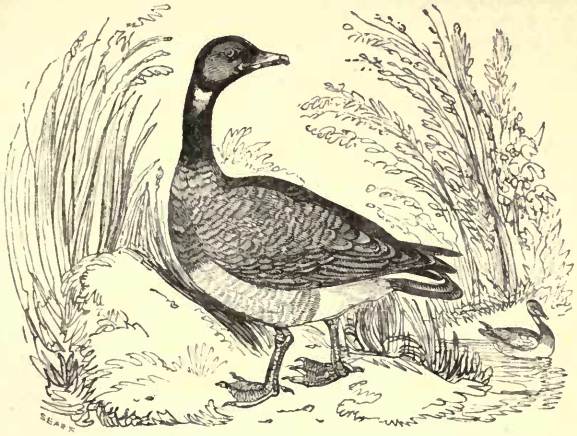
Sir John Sebright says, "a breed cannot be improved, or even continued in the degree of perfection at which it has already arrived, but by breeding from individuals, so selected as to correct each other's defects, and by a judicious combination of their different properties (a position that I believe will not be denied); it follows that animals must degenerate by being long bred from the same family, without the intermixture of any other blood, or from being what is technically called *bred in-and-in*."

To Mr. Meynell's opinion to the contrary, he replies—"Mr. Meynell's fox-hounds are quoted as an instance of the success of this practice (i. e. *the in-and-in*); but, on speaking to that gentleman upon the subject, I found that he did not attach the meaning that I do to the term in-and-in. He said, that he frequently bred from the father and the daughter, and the mother and the son. This is not what I consider as breeding in-and-in; for the daughter is only half of the same blood as the father, and will probably partake, in a great degree, of the properties of the mother." Again: "I have tried many experiments by breeding in-and-in upon dogs, fowls, and pigeons; the dogs became, from strong spaniels, weak and diminutive lap-dogs; the fowls became long in the legs, small in the body, and bad breeders."

Sir W. C——n, in his *Treatise on Greyhounds*, is unfavourable to breeding a-kin.

He says, "If continued for some litters, a manifest inferiority of size, and a deficiency of bone, will soon be visible, as well as a want of courage and bottom; though the beauty of the form, with the exception of the size, may not be diminished."—*Blaine.*—*Sir John Sebright.*

Brent Goose (*Anas Bernicla*, Linn.; *Le Cravant*, Buff.), *s.*



This is of nearly the same shape, but somewhat less than the Bean Goose, from which it differs in the colour of its plumage, being mostly of a uniform brown, the feathers edged with ash; the upper parts, breast and neck, are darker than the belly, which is more mixed and dappled with paler cinereous and gray: the head and upper half of the neck are black, excepting a white patch on each side of the latter, near the throat: the lower part of the back and rump are also black: the tail, quills, and legs dusky: the bill is dark, rather of a narrow shape, and only about an inch and a half long: the irides are light hazel. In the female and the younger birds, the plumage is not so distinctly marked, and the white spots on the sides of the neck are often mixed with dusky; but such varyings are discernible in many other birds, for it seldom happens that two are found exactly alike.

The brent geese, like other species of the same genus, quit the rigours of the north in winter, and spread themselves southward in greater or less numbers, impelled forward, according to the severity of the season, in search of milder climates. They are then met with on the British shores, and spend the winter months in the rivers, lakes, and marshes in the interior parts, feeding mostly upon the roots, and also on the blades of the long course grasses and plants which grow in the water; but, indeed, their varied modes of living, as well as their other habits and propensities, and their migrations, haltings, breeding-places, &c., do not differ materially from those of the other numerous families of the wild geese. Buffon gives a detail of the devastations which they made, in the hard winters of 1740 and 1765, upon the cornfields on the coasts of Picardy in France, where they appeared in such immense swarms, that the people were literally raised (en masse we suppose) in order to attempt their extirpation, which, however, it seems they could not effect, and a change in the weather only caused these unwelcome visitants to depart.

The brent and the bernacle were formerly, by some ornithologists, looked upon as being of the same species; later observers, however, have decided differently, and they are now classed as distinct kinds.—*Bewick.*

Bret, *s.* A fish of the turbot kind.

Brew, *v.* To make liquors by mixing several ingredients; to prepare by mixing things together.

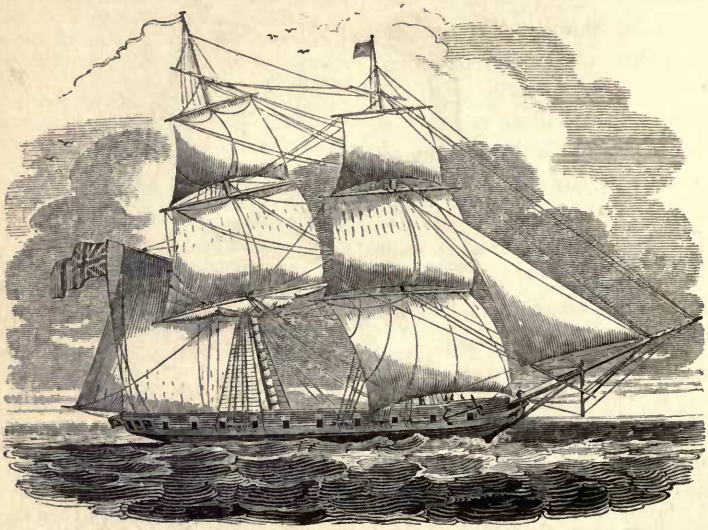
Bridle, *s.* The headstall and reins by which a horse is restrained and governed; a restraint, a curb, a check.

Bridle, *v.* To guide by a bridle; to restrain, to govern.

Bridle-hand, *s.* The hand which holds the bridle in riding.

Briery, *a.* Rough, full of briers.

Brig, *s.* A square-rigged vessel with two masts.



This class of vessels are generally employed as merchantmen and cruisers; and from their sea-worthy qualities and handy rig, are at once safe and easily worked. Latterly they have been introduced into the Royal Yacht Club; and the proud boast of having built one of the fastest and finest vessels in the world, has been recently achieved by the Earl of Belfast.

The Water Witch is 331 tons measurement, and has more than realised all that a builder could expect. She has, in every trial, proved her superiority; and in all weathers maintained a decided advantage over every antagonist. A letter from the noble owner, elicited by some trifling misstatement, concerning her model, &c., appeared in a late number of the *Sporting Magazine*, and as it is briefly descriptive of this beautiful brig, we have transferred it from the periodical.

"Her stern is upright, and, consequently, not so handsome as if it had more over-hung; but being built for a man-of-war, the intention (which has completely succeeded) was to enable her to run two guns out astern without a platform, which most vessels are obliged to have, and which is exceedingly inconvenient, inasmuch as it takes up a considerable portion of the quarter-deck.

"As regards the quantity of canvas, her sails are the same size as a ten-gun brig; nor has she any advantage in being without fittings below, having all the bulk-heads up (with the exception of the one that ought to divide the captain's cabin from the gun-room), which was omitted, to make a larger and more airy cabin for my friends.

"Add to this, that she had her full weight of stores, &c., on board, as if provisioned for five months, with eight eighteen-pound carronades, and two long six-pounders, three boats, all spare spars, &c., on deck.

"I have only to add, that to this day she has beaten everything that has ever attempted to sail with her, both large and small; and although His Majesty's ship Vernon (two thousand two hundred tons) had the advantage in light breezes of her one day, by crossing to windward of her, (after a trial of eight hours) about a cable's length, she having started half a cable's length to leeward of the Vernon, I understand she retaliated next day by beating the Vernon (under double-reefed topsails and top-gallant sails and considerable

head-sea) two or three miles. I can also state, she never took advantage of any of her opponents in starting; and that I should not have the least objection to change her eighteen-pounders for four and twenty-pounders, and sail any square-rigged vessel (now built) in England for whatever sum they please."

Brigandine, or Brigantine, *s.* A light vessel, such as has been formerly used by corsairs or pirates. They are still used in the Mediterranean.

Bright, *a.* Shining, glittering, full of light; clear.

Brilliant, *a.* Shining, sparkling.

Brimstone, *s.* Sulphur.

Brinded, *a.* Streaked, tabby.

Brindle, *s.* The state of being brinded.

Brindled, *a.* Brinded, streaked.

Brine, *s.* Water impregnated with salt, the sea.

Brisket, *s.* The breast of an animal.

Bristle, *s.* The stiff hair of swine. Hogs' bristles for fly tying are dyed in the same manner as feathers and wool. They require, however, to be kept longer in the dye-pot.

Bristle, *v.* To stand erect as bristles.

Brit, *s.* The name of a fish.

Broach, *v.* To spit, to pierce as with a spit; to pierce a vessel in order to draw the liquor.

Brock, *s.* A badger. Brocket, *s.* A red deer, two years old.

Brogue, *s.* A kind of shoe; a corrupt dialect.

Broil, *v.* To dress or cook by laying on the coals.

Broke. Preterimperfect tense of the verb *To break*. Applied to a dog when perfect in field discipline.

Broken Knees, Paste for.

Take pipe-clay and alum in equal parts; powder them, and reduce them in water to the consistency of cream; should the composition become dry, dilute it with water; stronger applications, as red precipitate and burnt alum, are occasionally necessary.

When the wound heals use any ointment coloured with lamp-black.

Bronchial, *a.* Belonging to the throat.

Bronchotomy, *s.* The operation which opens the windpipe by incision, to prevent suffocation.

Bronze, *s.* Brass; a medal.

Brood, *v.* To sit on eggs to hatch them; to cover chickens under the wing.

Brood, *s.* Offspring, progeny; a hatch, the number hatched at once; the act of covering the eggs.

Brood Mares.

No part of a racing establishment requires stricter attention than the brood mares. They should be kept, during the winter, in a paddock well supplied with water; also with a

roomy hovel, with two wide entrances, to prevent accidents. There should also be rollers up each side of the door-way, as foals are apt to have their hips knocked down in striking them, or by getting squeezed against them by the mares in passing in or out. Not more than two mares should be kept in one paddock.

In winter, brood mares should be fed with the best hay; and, if in low condition, should have cold bran mashes twice a day. When in foal, the greatest care should be taken that their food be of the sweetest nature; the olfactory organs of a mare, during the period of her gestation, being extremely sensitive, and mouldy hay or straw has frequently caused premature birth. Indeed, extraordinary as it may appear, abortion has been caused by a groom merely striking a mare on the nose with his hand, which proves that, during the time they are in foal, they cannot be kept too quiet, or free from danger or excitement of any sort. The smell of carrion, or of animals fresh slaughtered, should be carefully avoided; for it is very provoking to lose a fine foal, after the heavy expense incurred, by these apparently trifling circumstances, so easily guarded against.

Attention should be paid to the state of the bowels of a newly dropped foal. If a passage be not observed, the gut should be carefully emptied by the hand. About a month previous to foaling, mares should be fed, at least twice a day, with cold bran mashes, as also plentifully supplied with any forward succulent food—such as lucerne, tares, clover, &c., but the two first are best. It is desirable to have the mares foal as early as possible, and when the mare is barren, she may be covered as early in February as she will take the horse, and if stinted she will foal early in January—thereby gaining a considerable advantage over those foaled later in the year. For instance, a colt dropped in January is fifteen months old, when in racing chronology he only reckons for twelve. It must, however, be observed, that it is impossible to have mares to foal every year in the month of January, unless the mare were to take the horse every year in February, as her time of gestation is eleven months and some days. Consequently, if she were to be covered in January, she would foal (out of the year) in December, as was the case with the December filly.

When mares are near their time of foaling, they should be carefully watched, for they will always approach water at this time; and as they generally (though not invariably) foal standing up, the produce may thus be lost. Some mares should be watched from another cause, as they will kill their foals as soon as they are dropped. When a mare has foaled, she should have a pail full of warm gruel, and should live generously until there is grass for her. The colt should also be fed with oats (bruised) twice or three times a day, which it will begin to eat at three days old.

The covering season commences on the first of February. Mares should be tried by the teazer every ninth day until the end of the season, which terminates in July.

Those mares which have foaled will be in season on the third day after; but it is not advisable to put them to the horse until the ninth, when they will probably be stinted. A mare, with a foal at her foot, is quite as likely to stand to the horse, if not more so, than one which has never bred, or proved barren the previous season; as it is called "missed the horse," though she might have bred the year before.

Various have been the measures resorted to, to stint mares to the horse, which have proved barren for several years, or perhaps never bred at all—such as bleeding, immersing in cold water, and putting them in motion after the horse has retired; but no great faith is to be placed in any of them. It said that opium has been administered with effect; but in the cases of Victoria and Echo, every possible means tried, proved abortive.

Perhaps it would be better that stallions which cover at a high price, should only be suffered to serve a certain number of mares, as in that case it would not be necessary to pamper them to that degree generally practised, to enable them to exceed their natural powers. I have no hesitation in saying, that, in the long run, their produce would be greater, and I reason thus:—A mare which has missed three or four seasons together, is put to an ass, and generally stands to him. Now whatever may be the supposed increased physical powers of this animal, the effect, in this instance, is principally to be attributed to the cool state of his blood.

It is usually the practice to keep stallions very full of flesh, perpetually crammed with corn, by which their blood must be in a constant state of fever, and many of them have died in consequence of this treatment. Eggs are also frequently given them in the covering season. Some years since, a person in Shropshire, who purchased a horse out of the north, called "Young Roscius," at a considerable price, not taking the precaution of cracking the egg before he gave it to him, it got across his gullet and killed him. If, instead of having recourse to a common farrier, who attempted to force it down with the butt-end of a whip, he had sent for a veterinary surgeon, it might have been dissected out with the greatest ease and safety, and his horse's life preserved. Stallions, at the end of the

season, should be physicked and turned out into a paddock, with very little corn; but the first day they are turned out, great precaution is necessary. They should be walked out on that day from five o'clock in the morning until evening; for if turned into the paddock fresh from their stable, they would gallop about for hours; and some have been known to do so until they have dropped down dead. Early in November, they should be brought into the stable again, physicked, moderately fed at first; well cleaned, and exercised every day for two or three hours; and this plan should be continued until the commencement of the next covering season. The air and exercise, say an hour or two a day, at this time, would invigorate their bodies, and conduce to their general health. Grooms may object to this system; but it has reason on its side, which they have not always on theirs.—*Sporting Repository.*

Brook, *s.* A running water; a rivulet.

Broom, *s.* A shrub; a besom, so called from the matter of which it is made.

Broth, *s.* Liquor in which flesh is boiled.

Brown, *a.* The name of a colour.

For a rich fiery Brown.—Put down some *young fustic*, about six chips, boil your stuff in three or four quarts of water; this takes a long time to give out the dye. If your fur be very white, and free from black hairs, you may draw two shades of fine bright yellows from it; you should put the more fur on that account. Then put down five or six more chips and boil it on till you bring it to a very deep orange; lift out your fur, and if you have half a pound of it you must put down an ounce of black grain, or half an ounce to a quarter of a pound; boil it and put in your stuff, and boil on till you have a blood orange.—Lift out your stuff, put in three teaspoonfuls of brasil wood in powder, stir it up and put down your stuff, boil till it comes to a light fiery brown. If you see what brasil you have added does not bring it to that shade, add more, and when you are near it take out your stuff, and have prepared in another vessel half a tablespoonful of archill, by boiling it in water, put half a noggin of this liquor into your pot and boil your stuff in it, and then try your shade, as I think you must be near it. Put in a little stale urine, and if not dark enough put in a little salt of tartar, throw in your stuff and I think you have it. If you want it darker, repeat the same quantity of salt of tartar. If you wish you may have two shades from this very process, or by drawing the fur may get many fine shades of claret by using double the quantity of black grain and more archill. Be nice with the archill, as if you darken too much with it, you can never discharge it.

Brown Varnish.—Rectified spirits of wine one quart, seed lac six ounces, dissolve the lac in the spirits two days and it is done, you must keep it the chief of the first day near the fire. This is the best of all varnishes, it must not be laid on any thing that is oiled.—*Ancient Recipes.*

Browse, *v.* To eat branches or shrubs.

Bruise, *v.* To crush or mangle with a heavy blow.

Bruise, *s.* A hurt with something blunt and heavy.

Brush, *s.* An instrument for rubbing. The tail of a fox. "To get the brush," in sporting parlance, means to be foremost rider at the death.

Brush, *v.* To sweep or rub with a brush; to strike with quickness; to fly over; to skim lightly.

Brusher, *s.* He that uses a brush. A horse liable to *speedy cut, &c.*

Brushwood, *v.* Rough, shrubby thickets.

Bubo, *s.* The groin, from the bending of the thigh to the scrotum; all tumours in that part are called buboes.

Buck, *s.* The male of the fallow deer; the male of rabbits, and other animals.

Buck, *v.* To copulate as bucks and does.

Buckbean, *s.* A plant, a sort of trefoil, intensely bitter; its properties are tonic, diuretic, and purgative.

Buckle, *s.* A link of metal, with a tongue or catch, made to fasten one thing to another. Buckle, *v.* To fasten with a buckle.

Buckram, *s.* A sort of strong linen cloth, stiffened with gum.

Bud, *s.* The first shoot of a flower; a germ.

Bud, *v.* To put forth young shoots or germs.

Buff, *s.* Leather prepared from the skin of the buffalo, used for waist-belts, pouches, &c.; a colour.

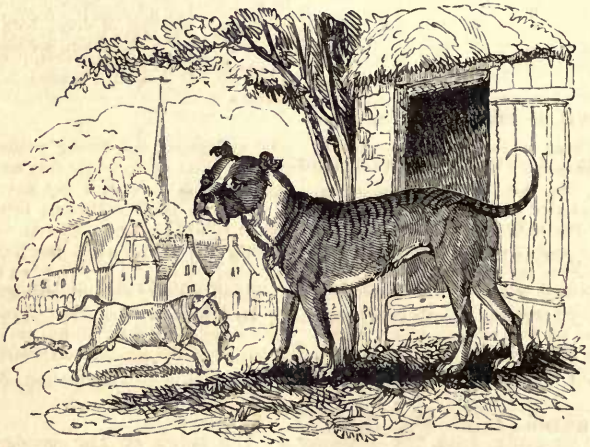
To dye light shades of Buff, and other colours.—To assist in mixing, the drakes are said to be dyed by ivy and laurel alone; I do not vouch for their being fast and yet they may.

For Buffs.—Get some rich common fustic chips, put down three or four of them in three or four quarts of water with your stuff, and when it comes to a pale yellow, put in some pale madder, by a teaspoonful at a time, and you have, by boiling a sufficient length of time, a light buff. Boil on and put in more madder, and you will have a deeper; if your yellow is too faint put in more fustic, half an hour before your next addition of madder. By using young fustic chips and madder in the same way, you will get nice rich colours, something between a rich cinnamon and a light brick red.—*Old Recipe.*

Bull, *s.* The male of black cattle; a blunder.

Bullbaiting, *s.* The sport of baiting bulls with dogs.

Bull-dog (*Canis Molossus*), *s.* A dog of particular form, remarkable for his courage.



The bull-dog is low in stature, deep-chested, and strongly made about the shoulders and thighs, the muscles of both of which are extremely developed. His head is broad,

his nose short, and the under jaw projects beyond the upper, which gives him a fierce and disagreeable aspect. His eyes are distant and prominent, and have a peculiar suspicious-like leer, which, with the distension of his nostrils, gives him also a contemptuous look; and from his teeth being always seen, he has the constant appearance of grinning, while he is perfectly placid. He is the most ferocious and unrelenting of the canine tribe, and may be considered courageous beyond every other creature in the world, for he will attack any animal, whatever be his magnitude.

The internal changes which determine the external characters of this dog, consist in a great development of the frontal sinuses, a development which elevates the bones of the forehead above the nose, and draws the cerebral cavity in the same direction.

But the most important quality, and that, perhaps, which causes all the others, although we cannot perceive the connexion, is the diminution of the brain. The cerebral capacity of the bull-dog is sensibly smaller than in any other race; and it is doubtless to the decrease of the encephalon that we must attribute its inferiority to all others in every thing relating to intelligence. The bull-dog is scarcely capable of any education, and is fitted for nothing but combat and ferocity.

This animal takes his name from his having been employed, in former times, in assaulting the bull, and he is used for the same purpose at the present day, in those districts where this brutal amusement is still practised.

Nothing can exceed the fury with which the bull-dog falls upon all other animals, and the invincible obstinacy with which he maintains his hold. In attacking the bull, he always assails him in front, and generally fastens upon his lip, tongue, or eye, where he holds and hangs on, in spite of the most desperate efforts of the other to free himself from his antagonist, which affords ample proof of the amazing strength and power of this animal.

Whenever a bull-dog attacks any of the extremities of the body, it is invariably considered a mark of his degeneracy from the original purity of blood. Puppies will assail a bull, and thereby give a decided proof of their breed, when only six months old; and, if permitted, will rather suffer themselves to be destroyed than relinquish the contest.

Although this trial is sometimes made with the whelps of a particular litter, to demonstrate the purity of their descent, and to prove that there has been no improper cross by which the future fame of their posterity may be affected, yet they are seldom entered in a regular ring until from fifteen to eighteen months old. But their ligaments cannot be considered as at their full strength until they are at least two years old. Indeed, amateurs say, that they are not at their prime until they have attained four or five years of age.

The bull-dog is admitted by naturalists to be one of the original and peculiar races of Britain, and may be ranked, in point of originality, with the shepherd's dog and Irish greyhound. In various districts of England this breed is still preserved in its native purity, by that class of people who delight in bull-baiting and fighting of dogs; both of which amusements, alike inhuman, are now happily on the decline.—*Brown.*

Bull-head, *s.* The name of a fish.

The bull-head seldom exceeds the length of three inches and a half; the head is large, broad, flat, and thin at its circumference, being well adapted for insinuating itself under stones; on the middle part of the covers of the gills is a small crooked spine turning inwards; the eyes are very small, the irides yellow; the body grows slender towards the tail, and is very smooth; the colour is as disagreeable as its form, being dusky, mixed with a dirty yellow; the belly whitish. They are found all the summer in holes, among mud and gravel, and among weeds and flat stones in clear water, where they may be seen sunning themselves in a hot day; put the hook, with a small red worm, before them, and they will instantly take it. Notwithstanding the disgust which the form of the bull-head creates, the largest, when the heads are cut off, are very delicious eating; they are also good baits for other fish. Some anglers think them, when their gill-fins are cut away, preferable to the minnow.—*Daniel.*

Bull Terrier (*Canis Pugilis*), *s.*

This variety, which has now assumed a fixed character, as its name implies, was produced by a cross between the bull-dog and terrier, and this variety proves to be a handsomer dog than either of its progenitors. It is a sprightly and showy animal, and even better adapted for mischievous sport than either of the above dogs. He is airy and pleasant tempered, but possesses great fierceness when his energies are called into action.

The full-sized bull terrier is larger than either of his original parents, from which we

are inclined to think he has a dash of the mastiff in him. He has rather a large square head, short neck, deep chest, and very strong legs. He possesses great strength of jaw, and draws a badger with much ease. He is all colours, and often white, with large black or brown patches on different parts of his body. His hair is short and stiff.

This variety has risen into great reputation with gentlemen of the fancy, and consequently good ones sell for a high price. Bull terriers are to be had of every colour in the metropolis—and of late years, dealing in these and other dogs has become a regular trade.—*Brown, &c.*

BULL TROUT, BULGER, or SCARF, *s.*

This species migrates, like the salmon, into several of our rivers; they begin to run up the rivers in May, and are most plentiful in September and October, although the flesh is not then so good (on account of their spawning) as in July and August; when boiled, it is of a pale red, and well flavoured, but drier than that of the salmon. Mr. Pennant has described one taken in June, 1769, in the Tweed below Berwick.

The shape was thicker than the common trout; the irides silver, and the head thick, smooth, and dusky, with a gloss of blue and green; the back of the same colour, growing fainter towards the lateral line, which is straight; and the sides, as far as this line, are marked with large irregular-shaped spots of black; the sides beneath the line and the belly are white; the tail is broad and even at the end; the weight was three pounds two ounces.

The bull have the same haunts as the salmon trout, and are sometimes met with in gentle shallow streams, running between and over rocks and stones, and are also found about weirs, made across rivers. The baits and tackle should be the same as for the salmon trout.—*Daniel.*

BUMP, *s.* A swelling, a protuberance.

BUMPER, *s.* A cup filled.

BUNTING, (*Emberiza miliaria*, LINN.; *Le Proyer*, BUFF.) *s.* The name of a bird.

The principal difference between this kind and that of the passerine order, consists in the formation of the bill, which in the bunting is of a very singular construction.

The two mandibles are movable, and the edges of each bend inwards; the opening of the mouth is not in a straight line as in other birds, but at the base, the junction is formed by an obtuse angle in the lower mandible, nearly one-third of its length, which is received by a corresponding angle in the upper one; in the latter there is a strong knob, of great use in breaking the harder kinds of seeds and kernels, on which it feeds. The tongue is narrow, and tapers to a point like a toothpick; the first joint of the outer toe is joined to that of the middle one.—*Bewick.*

BUOY, *s.* A piece of cork or wood tied to a weight. Dog or sheep skins prepared with a coating of tar and tallow, are used for suspending spellits and herring nets—on the western and southern coasts of Ireland they are called *puckawns.*

BUOY, *v.* To keep afloat. BUOYANCY, *s.* The quality of floating.

BUR, *s.* A rough head of a plant.

BURBOT, *s.* A fish full of prickles.

BURN, *v.* To consume with fire; to wound with fire.

BURNISH, *v.* To polish.

BURNISHER, *s.* The person that burnishes or polishes; the tool used—it is commonly a dog's tooth set in a stick.

BURROW, *s.* Holes made in the ground by rabbits.

BURROW, *v.* To mine as conies or rabbits.

BURST, *v.* To break suddenly. BURST, *s.* A cry of hounds.

BURT, *s.* A flat fish of the turbot kind.

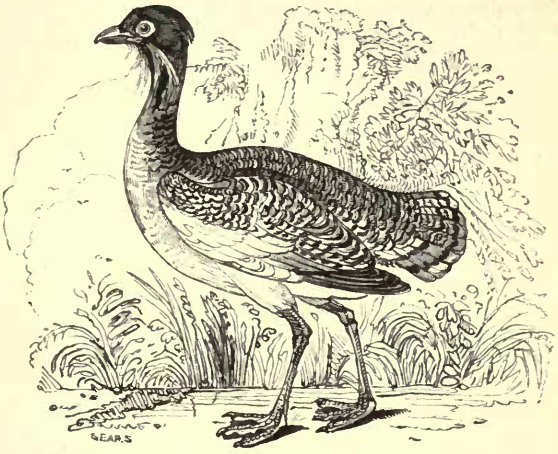
BUSH, *s.* A thick shrub.

BUSHEL, *s.* A measure containing eight gallons; a strike.

BUSHY, *a.* Thick; full of small branches; full of bushes.

BUSS, *s.* A vessel for fishing—a herring boat.

BUSTARD, (*Otis Tarda*, LINN.; *L'Outarde*, BUFF.)



Great Bustard.—This very singular bird, which is the largest of our land birds, is about four feet long, and weighs from twenty-five to thirty pounds; its characters are peculiar, and with such as connect it with birds of the gallinaceous kind, it has others which seem to belong to the ostrich and the cassowary. Its bill is strong, and rather convex: its eyes red; on each side of the lower bill there is a tuft of feathers about nine inches long; its head and neck are ash-coloured. In the one described by Edwards there are on each side of the neck two naked spots, of a violet colour, but which appeared to be covered with feathers when the neck was much extended. The back is barred transversely with black and bright rust-colour on a pale reddish ground; the quills are black, the belly white; the tail consists of twenty feathers; the middle ones are rust-colour, barred with black; those on each side are white, with a bar or two of black near the ends; the legs are long, naked above the knees, and dusky; it has no hind toe, its nails are short, strong, and convex both above and below; the bottom of the foot is furnished with a callous prominence, which serves instead a heel. The female is not much more than half the size of the male: the top of her head is of a deep orange, the rest of the head brown; her colours are not so bright as those of the male, and she has no tuft on each side of the head. There is likewise another very essential difference between the male and the female: the former is furnished with a sack or pouch, situated in the forepart of the neck, and capable of containing about two quarts; the entrance to it is immediately under the tongue. This singular reservoir was first discovered by Dr. Douglas, who supposes that the bird fills it with water as a supply in the midst of those dreary plains where it is accustomed to wander. It likewise makes a farther use of it in defending itself against the attacks of birds of prey. On such occasions, it throws out the water with such violence, as not unfrequently to baffle the pursuit of its enemy.

Bustards were formerly more common in this island than at present; they are now found only in the open counties of the south and east, in the plains of Wiltshire, Dorsetshire, and in some parts of Yorkshire; they were formerly met with in Scotland, but are now supposed to be extinct there. They are slow in taking wing, but run with great rapidity, and when young are sometimes taken with grey-hounds, which pursue them with

great avidity: their chase is said to afford excellent diversion. The great bustard is granivorous, but feeds chiefly on herbs of various kinds, it is also fond of those worms which are seen to come out of the ground in great numbers before sun-rise in the summer; in winter, it frequently feeds on the bark of trees; like the ostrich, it swallows small stones, bits of metal, and the like. The female builds no nest, but making a hole in the ground drops two eggs, about the size of those of a goose, of a pale olive brown, with dark spots. She sometimes leaves her eggs in quest of food; and if during her absence, any one should handle, or even breathe upon them, she immediately abandons them.

Bustards are found in various parts of Europe, Asia, and Africa; but have not hitherto been discovered on the new continent.

The Little Bustard, (*Otis Tetrax*, Linn. *La Petite Outarde*, Buff.) is in length only seventeen inches. The bill is pale brown; irides red; the top of the head is black, spotted with pale rust colour; the sides of the head, the chin, and throat, are of a reddish white, marked with a few dark spots; the whole neck is black, encircled with an irregular band of white near the top and bottom; the back and wings are rust colour, mottled with brown, and crossed with fine irregular black lines, the under parts of the body, and outer edges of the wings, are white: the tail consists of eighteen feathers; the middle ones are tawny, barred with black, the others are white marked with a few irregular bands of black, the legs are grey. The female is smaller, and has not the black collar on the neck; in other respects she nearly resembles the male.

This bird is very uncommon in this country: and we have seen only two of them, both females. The figure was drawn from one sent by W. Trevelyan, Esq. which was taken on the edge of Newmarket heath, and kept alive about three weeks in a kitchen, where it was fed with bread and other things, such as poultry eat. It is very common in France, where it is also a very shy and cunning bird; if disturbed it flies two or three hundred paces, not far from the ground, and then runs away much faster than any one can follow on foot. The female lays her eggs in June, to the number of three or four, of a glossy green colour: as soon as the young are hatched, she leads them about as the hen does her chickens: they begin to fly about the middle of August.

Both this and the great bustard are excellent eating, and, we should imagine, would well repay the trouble of domestication: indeed, it seems surprising that we should suffer these fine birds to run wild, and be in danger of total extinction, which, if properly cultivated, might afford as excellent a repast as our own domestic poultry, or even as the turkey, (*vide* Turkey) for which we are indebted to distant countries.—*Bewick.*

Butt, *s.* The place on which the mark to be shot at is placed; a vessel; a barrel containing one hundred and twenty-six gallons of wine; the thick or lower joint of a fishing rod; the handle of a cue.

The marks usually shot at by archers, for pastime, were "butts, prickes, and roavers." The butt, we are told, was a level mark, and required a strong arrow, with a very broad feather; the pricke was a "mark of compass," but certain in its distance; and to this mark strong swift arrows, of one flight, with a middling sized feather, were best suited; the roaver was a mark of uncertain lengths. It was, therefore, proper for the archer to have various kinds of arrows, of different weights, to be used according to the different changements made in the distance of the ground.

The Cornish men are spoken of as good archers, who shoot their arrows to a great length; they are also, says Carew, "well skilled in near shooting, and in well aimed shooting: the butts made them perfect in the one, and the roaving in the other, for the prickes, the first corrupters of archery, through too much preciseness, were formerly scarcely known, and little practised." Other marks are occasionally mentioned; as the standard, the target, hazel wands, rose garlands, and the popinjay, which, we are told, was an artificial parrot.—*Strutt.*

Butt, *v.* To strike with the head.

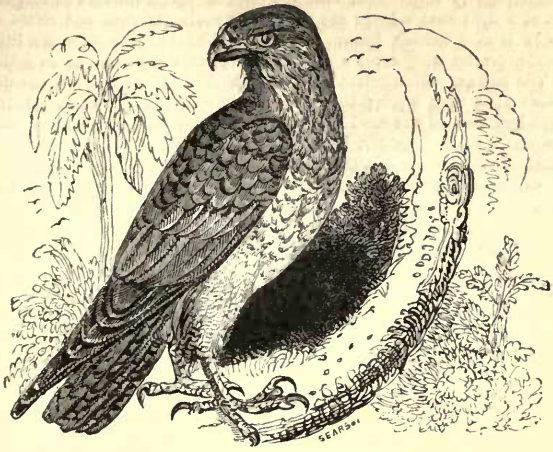
Butter, *s.* An unctuous substance, made by agitating the cream of milk till the oil separates from the whey.

Butterfly, *s.* A beautiful insect.

Buttock, *s.* The rump, the part near the tail.

Button, *s.* Any knob or ball; the bud of a plant.

BUZZARD, *s.* A degenerate or mean species of hawk.



The Common Buzzard, or Puttock.—(*Falco Buteo*, LINN.; *La Buse*, BUFF.) M. Buffon distinguishes the kites and the buzzards from the eagles and hawks, by their habits and dispositions, which he compares to those of the vultures, and places them after those birds. Though possessed of strength, agility, and weapons to defend themselves, they are cowardly, inactive, and slothful, they will fly before a sparrow-hawk, and when overtaken, will suffer themselves to be beaten, and even brought to the ground, without resistance. The buzzard is about twenty inches in length, and in breadth four feet and a half. Its bill is of a lead colour, eyes pale yellow: the upper parts of the body are of a dusky brown colour; the wings and tail are marked with bars of a darker hue; the under parts pale, variegated with a light reddish brown; the legs are yellow; claws black. But birds of this species are subject to greater variations than most other birds, as scarcely two are alike: some are entirely white, of others the head only is white, and others again are mottled with brown and white.

This well-known bird is of a sedentary and indolent disposition; it continues for many hours perched upon a tree or eminence, whence it darts upon the game that comes within its reach: it feeds on birds, small quadrupeds, reptiles and insects. Its nest is constructed with small branches, lined in the inside with wool and other soft materials; it lays two or three eggs, of a whitish colour, spotted with yellow. It feeds and tends its young with great assiduity. Ray affirms, that if the female be killed during the time of incubation, the male buzzard takes charge of them, and patiently rears the young till they are able to provide for themselves.

* * *

The Honey Buzzard (*Falco Apivorus*, LINN.; *La Bondrée*, BUFF.), is as large as the buzzard, measuring twenty-two inches in length; the wings extend above four feet. Its bill is black, and rather longer than that of the buzzard; the eyes are yellow; the head large and flat, and of an ash-colour; the upper parts of the body dark brown; the under parts white, spotted or barred with rusty brown on the breast and belly; tail brown, marked with three broad dusky bars, between each of which are two or three of the same colour, but narrower; the legs are stout and short, of a dull yellow colour; claws black.

This bird builds a nest similar to that of the buzzard, and of the same kind of materials: its eggs are of an ash-colour, with small brown spots. It sometimes takes possession of the nests of other birds, and feeds its young with wasps and other insects. It is fond of field-mice, frogs, lizards and insects. It does not soar like the kite, but flies low, from tree to tree, or from bush to bush. It is found in all the northern parts of Europe, and in the open parts of Russia and Siberia, but is not so common in England as the buzzard.

Buffon observes that it is frequently caught in the winter, when it is fat and delicious eating. * * *

The Moor Buzzard, Duck Hawk or White-headed Harpy (*Falco Æruginosus*, LINN.; *Le Busard*, BUFF.) is in length above twenty-

one inches. The bill is black; cere and eyes yellow; the whole crown of the head is of a yellowish white, lightly tinged with brown; the throat is of a light rust colour: the rest of the plumage is of a reddish brown, with pale edges; the greater wing coverts tipped with white. The legs are yellow; claws black.

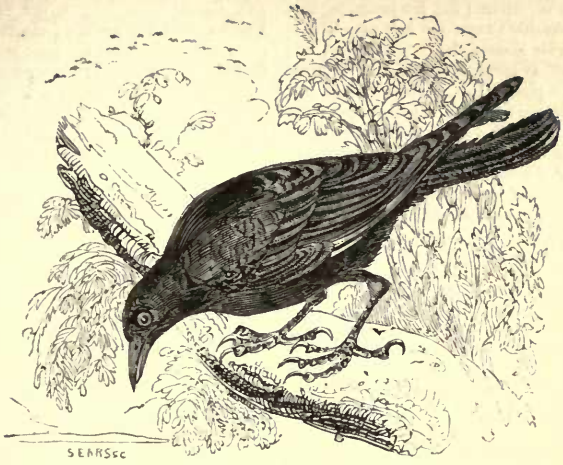
Birds of this kind vary much; in some, the crown and back part of the head are yellow; and in one deseribed by Mr. Latham, the whole bird was uniformly of a chocolate brown, with a tinge of rust colour.

The moor buzzard preys on rabbits, young wild ducks, and other water-fowl; and likewise feeds on fish, frogs, reptiles, and even insects. Its haunts are in hedges and bushes near pools, marshes, and rivers that abound with fish. It builds its nest a little above the surface of the ground, or in hillocks covered with thick herbage: the female lays three or four eggs of a whitish colour, irregularly sprinkled with dusky spots. Though smaller, it is more active and bolder than the common buzzard, and, when pursued, it faces its antagonist, and makes a vigorous defence.—*Bewick.—Latham.*

By-Law, *s.* By-laws are orders made for the good of those that make them, farther than the public law binds.

By-Way, *s.* A private obscure way.

By-Word, *s.* A saying, a proverb; a term of reproach.



THE CARRION CROW.

CAB, *s.* A contraction of cabriolet; a two-wheeled carriage.

CACKLE, *v.* To make a noise, as a goose or hen. CACKLER, *s.* A fowl that cackles.

CADDIS or CAD-BAIT, *s.* A kind of worm or grub.

The several kinds of cadews in their nympha, or maggot state, thus house themselves; one sort in straw, called from thence straw-worms; others in two or more parallel sticks, creeping at the bottom of brooks; a third, in a small bundle of pieces of rushes, duckweed, &c. glued together, therewith they float on the surface, and can row themselves about the water with the help of their feet; both these are called cad-bait. It is a curious faculty that these creatures possess, of gathering such bodies as are fittest for their purpose, and then so gluing them together, some to be heavier than water, that the animal may remain at bottom where its food is, and others to be so buoyant as to float, and there collect its sustenance; these houses are coarse, and show no outward art, but are within well tunnelled and have a tough hard paste, into which the hinder part of the maggot is so fixed, that its cell can be drawn after it without danger of leaving it behind, and it can also thrust out its body to reach the needful supplies, or withdraw into its covering for protection and safety.

These insects inhabit pits, ponds, low running rivers, or ditches, in cases of different forms, and composed of various materials; some of them inclosed in a very rough shell, found among weeds in standing waters, are generally tinged green; others are bigger than a gentle, and of a yellowish hue, with a black head; they are an excellent bait, and are found in most plenty in gravelly and stony rivulets, and by the sides of streams, in large rivers among stones.

To collect them, turn up the stones, and the best will adhere to them; when the quantity wanted is obtained, put them into a linen bag for five or six days, dip them, together with the bag, into water once a day, and hang them up; they will then turn yellow, become tough, and fitter for angling than when first got from the brook. If meant to be kept long, they must be put into a thick woollen bag, with some of the moist gravel or sand from the same rivulet whence they are taken; they must be wetted twice a day, but oftener in very hot weather; when you carry them abroad, fill the bag with water and

holding the mouth of it close, let the water run from them; thus they have been kept three weeks. Another way of preserving them is, by placing them in an earthen pot full of river water, with some of the gravel they were bred in at the bottom; but the preceding method is preferable: some use bait pans of different sizes for insects, the tops punched full of holes, not so large as to admit of their escaping when placed in the river, which not only keeps them cool, but supplies them with aliment in the fresh water; some keep them in moss in a woollen bag on a damp floor, taking care that the bag retains a proper moisture. Another mode of preserving caddis, and also grasshoppers, caterpillars, oak-worms, or natural flies, is to take the green withy bark from a bough six or seven inches round, and about a foot in length, turn both ends into the form of a hoop, and fasten them with a large needle and thread; stop up the bottom with cork, and bore the bark full of holes with a red hot wire, tie over it a colewort leaf, and lay it in the grass every night: in this manner caddis may be preserved until they turn to flies. When grasshoppers are to be preserved in the case, some grass must be put into it.

In angling with caddis, the line, when all out, should be as long as the rod, for three lengths next the hook, of single hairs, with the smallest float, and the least weight of lead, that the swiftness of the stream will allow to sink, and that may be aided by avoiding the violence of the current, and angling in the returns of a stream, or in the eddies betwixt two; which are also the most likely places wherein to kill fish, either at the top or bottom. The caddis may be at times, with very good effect, joined to a worm, and sometimes to an artificial fly, to cover the point of the hook, and also two or three together may be put upon the hook; but it is always to be angled with at the bottom, especially when by itself, with the finest tackle, and at all seasons is a most holding bait for trout and grayling.—*Daniel.*

CAG, *s.* A barrel or wooden vessel, made to contain four or five gallons.

CAGE, *s.* An enclosure of twigs or wire, in which birds are kept; a place for wild beasts; a prison for petty malefactors.

In *Falconry*, the cage is an oblong frame, four feet six inches long and two feet wide, made of light wood, the sides and ends are of a proper size for hawks to perch upon, and a little wadded, that it may not injure their feet. It is supported, when placed on the ground, by four legs, about a foot long. Slight rods of hazel are fixed across each end, to prevent the hawks from falling on the inside when they bait. A space of about twenty inches in length is left in the middle of the cage, in which the falconer places himself, carrying it by two straps that pass over his shoulders. The hawks are tied upon the cage as upon a perch, and by this contrivance many may be carried by one man.

Cages and other instruments used in falconry, are well described in the plates of the French Encyclopædia, printed in 1751.—*Sebright.*

CAGE, *v.* To enclose in a cage.

CAJEPUT OIL, *s.* Is highly stimulating; it is given internally as an antispasmodic, and applied as an external remedy for strains and rheumatism: it may be diluted with olive oil.

CALAMINE, (*Lapis calaminaris,*) *s.* A kind of fossil bituminous earth, which, being mixed with copper, changes it into brass.

CALCINATION, *s.* Such a management of bodies by fire as renders them reducible to powder: chemical pulverization.

CALCINE, *v.* To burn in the fire to a calx or substance easily reduced to powder.

CALCULUS, *s.* The stone in the bladder.

CALF, *s.* The young of a cow or deer; the thick, plump, bulbous part of the leg.

CALIBRE, *s.* The bore, or diameter of the barrel of a gun.

Calidris, (*Illiger,*) *s.* Sanderling, a genus thus characterised:—

Bill of middle length, slender, straight, soft, flexible throughout; compressed from the base; at the point depressed, flattened, and broader than in the middle, the nasal groove being prolonged towards the point; nostrils at the sides slit lengthwise; legs slender, three toes directed forwards, and almost entirely divided; wings of middle size, the first quill the longest.—*Montagu.*

Caliver, *s. obs.* A hand-gun, or harquebuse; an old musket.

Call, *v.* To name; to make a noise like quails and partridges.

Call, *s.* An instrument to call birds.

The Call of Birds is, in most instances, effected by the lungs and larynx; but some species of woodpecker, in the breeding season, have a very extraordinary and peculiar call to each other, by strong reiterated strokes of their bill against the dead sonorous branch of a tree. These calls seem to be a species of song.—*Montagu.*

Callosity, *s.* A kind of swelling without pain.

Callous, *a.* Hardened, insensible.

Callow, *a.* Unfledged, naked, wanting feathers.

Calomel, *s.* Mercury six times sublimed.

Calomel, or *submuriate of mercury*, is the most useful of the mercurial preparations, and composed of oxide of quicksilver and muriatic acid. When prepared it is a fine white powder, rather inclining to yellow, and very ponderous. It is the most efficacious *anthelminthic* we are acquainted with (see Anthelminthic), and an excellent *alterative.* When a brisk purgative is wanted, calomel may be added to the common physic, which is composed chiefly of aloes.

Though calomel possesses these useful qualities, it must be given with caution, and its effects carefully watched; as it sometimes acts very violently and unexpectedly on the stomach and bowels, and induces a dangerous degree of weakness. Salivation is sometimes the effect of calomel, when given daily as an alterative, or as a remedy for farcy or mange; the mouth becoming so sore, and the tongue so swollen, as to prevent the horse's feeding. When these accidents occur, the medicine should be discontinued a short time, and the horse allowed to drink plentifully of water-gruel, linseed infusion, or any other mucilaginous drink. When the bowels are affected by it, opium is the best remedy, should arrow-root gruel or wheat-flour gruel prove ineffectual. In some cases, where it has produced great irritation about the anus or bladder, opium should be given in the form of *clyster.* (See Clysters.) If the mouth becomes very sore, let it be washed with a solution of alum, by means of a syringe.

Whenever calomel is given, the horse must be kept warm, drink warm water, and have regular exercise. When calomel is given as an anthelminthic, or as a purgative, the dose is from one to two drachms; as an alterative, from fifteen grains to half a drachm. Calomel generally acts upon the kidneys, increasing the discharge of urine. (See Alteratives and Anthelminthics.)—*White.*

Calve, *v.* To bring forth a calf, spoken of a cow. To drop a fawn.

Calumba, *s.* A plant. The root is a good tonic and stomachic.

Calx, *s.* Any thing rendered reducible to powder by burning.

Camber, *s.* A piece of timber cut archwise. The bending of a gun-stock.

Camlet, or Camblet, *s.* A kind of stuff, originally made by a mixture of silk and camel's hair; it is now made with wool and silk. It is much used for shooting jackets, as it resists water well, and is light and strong.

Camphor, *s.* A kind of resin produced by a chemical process from the camphor tree. The tree from which camphor is extracted.

The following description of the properties of camphor was given me by an old M. D. Camphor is at once an *emollient*, an *antispasmodic*, an *anodyne*, a *febrifuge*, and a *sedative.*—*Condition of Hunters.*

CANARY, *s.* Wine brought from the Canaries; sack.

CANARY BIRD, (*Fringilla canaria*, LINN.) *s.* A much admired singing bird.

In length this beautiful species is about five inches and a half; the bill pale flesh-colour, passing into reddish white; eyes chestnut brown; the whole plumage of a rich, deep primrose colour, inclining to yellow; edge of the quills sometimes yellowish white; legs and feet the same colour as the bill. The female is distinguished from the male by the plumage being of a paler colour; the yellow round the bill, eye, and on the breast and edge of the wing, being also of a paler yellow; she is likewise rather larger and less slender in form towards the tail.

There are said to be upwards of thirty varieties of the breeds of canaries, which can be easily distinguished; and the number is increasing every year. In London, we have societies for promoting the breeds, and a premium is awarded to the competitor who comes nearest to the model of perfection given out by the society the season prior to the competition.

There are two distinct species of canaries, the plain and the variegated, or, as they are technically called, the gay spangles, or mealy; and jonks, or jonquils. These two varieties are more esteemed by amateurs than any of the numerous varieties which have sprung from them; and although birds of different feathers have their admirers, some preferring beauty of plumage, others excellence of song, certainly that bird is most desirable where both are combined. The first property of these birds consists in the cap, which ought to be of fine orange colour, pervading every part of the body except the tail and wings, and possessing the utmost regularity without any black feathers, as, by the smallest speck, it loses the property of a show-bird, and is considered a broken-capped bird. The second property consists in the feathers of the wing and tail being of a deep black up to the quill, as a single white feather in the wing or tail causes it to be termed a foul bird; the requisite number of these feathers in each wing is eighteen, and in the tail twelve. It is, however, frequently observed that the best coloured birds are foul in one or two feathers, which reduces their value, although they may still be matched to breed with.

* * *

A small breeding cage is all that is required for rearing these birds; but where a room can be allotted to the purpose, it ought to have shrubs for them to roost and build, with plenty of water to drink and bathe in, that being indispensable for all birds. The light should be admitted into the room from the east, for the benefit of the morning sun, and the windows should have wire cloth, that they may enjoy the fresh air. The floor of the apartment ought to be strewed with sand or white gravel, and on that should be thrown groundsel, chickweed, or scalded rapeseed; but when breeding, they should have nothing except hard chopped eggs, dry bread, cake without salt, and, once in two or three days, a few poppy-seeds. Some bird-fanciers give their breeding-birds plantains and lettuce-seeds; but this should be done sparingly, and only for two days, lest it should weaken them.

About the 15th of April they ought to be furnished with flax, soft hay, wool, hair, moss, and other dry materials, for building the nest, which usually occupies about three days: the time of incubation is thirteen days; but when the hen has sat eight or nine days, it is necessary to examine the eggs, holding them carefully by the ends, against the sun or a lighted candle, and to throw away the clear ones. Some bird-fanciers substitute an ivory egg until the last is laid, when the real ones are replaced, that they may be hatched at the same time.

When the young are to be reared by the stick, they must be taken from the mother on the eighth day, taking nest and all. Prior to this, the food should consist of a paste composed of boiled rapeseed, the yolk of an egg, and crumbs of cake unsalted, mixed with a little water; this must be given every two hours. This paste ought not to be too wet, and must be renewed daily, until the nestlings can feed themselves. The hen has generally three broods in the year, but will hatch five times in the season, each time laying six eggs.

The process of moulting, which takes place five or six weeks after they are hatched, is frequently fatal to them. The best remedy yet known is to put a small piece of iron into the water they drink, keeping them warm during the six weeks or two months which generally elapse before they regain their strength. This malady, to which they are all subject, is often fatal to the hen after the sixth or seventh year; and even the cock, though from superior strength he may recover, and continue occasionally to sing, and survive his mate four or five years, appears dull and melancholy from this period, till he gradually droops, and falls a victim to this evil.

If it is proposed to rear gay birds, the cock and hen should be of the same deep colour; if mottled birds are required, both parents should be mottled. When a gay bird and a

fancy bird are matched, they are termed mule-birds, because they are irregularly mottled in their plumage, and therefore of no value, although they be equally good singers. The spangled or French canary cock, with a mealy hen, often produces beautiful varieties.

* * *

The most common cause of disease in birds proceeds from a superabundance of food, which brings on repletion. In this case the intestines descend to the extremities of the body, and appear through the skin, while the feathers on the part affected fall off, and the poor bird, after a few days, pines and dies. If the disease is not too far gone, putting them in separate cages, and confining them to the cooling diet of water and lettuce-seed, may save the lives of many: they are also subject to epilepsy, asthma, ulcers in the throat, and to extinction of the voice. The cure for the first is doubtful; it is said that if a drop of blood fall from the bill, the bird will recover life and sense; but if touched prior to falling of itself, it will occasion death. If they recover from the first attack, they frequently live for many years without any alteration in their note. Another cure is to inflict a slight wound in the foot. Asthma is cured by plantain, and hard biscuit soaked in white wine; while ulcers, like repletion, must be cured by cooling food. For extinction of voice, the cure ought to be hard yolk of eggs, chopped up with crumbs of bread, and for drink a little liquorice-root, or a blade of saffron in water. In addition to these evils, the canary is infested by a small insect, if they are kept dirty. To avoid this, they should have plenty of water to bathe in, in a new cage, covered with new cloth, and their seeds well sifted and washed. These attentions, if troublesome, are nevertheless necessary to possess a thriving bird. When wild, it has already been remarked, that all birds require water, and to a canary this is so necessary, that if a saucer or cup of snow be put into the cage they will flutter against it with the utmost delight, even during the most severe winters. They are bred in immense numbers, both for amusement and commerce, in France, Tyrol, Germany, and in this country: those from Germany are in the least esteem, from their living only one or two years in this country, although the cock of this variety is an approved songster.—*Montagu.*

CANCER, *s.* A crabfish; a virulent swelling; a sore.

The virulent, dreadful ulcer, that is so fatal in the human subject, and is called cancer, is unknown in dogs; yet there is very commonly a large scirrhous swelling of the teats in bitches, and of the testicles (though less frequent) in dogs, that as it sometimes becomes ulcerated, so it may be characterised by this name. In the early state of this disease, discutients prove useful; as vinegar with salt, and camphor and Spanish flies with mercurial ointment, have sometimes succeeded, taking care to avoid irritating the part so much as to cause blister. But when the swelling is detached from the belly, and hangs pendulous in the skin, it had better be removed; and, as a future preventative, suffer the bitch to breed. Scirrhous testicles are likewise sometimes met with; for these no treatment yet discovered succeeds, but the removal of the part, and that before the spermatic chord becomes much affected, or it will be useless.—*White.*

CANCEROUS, *a.* Having the virulence of a cancer.

CANDLE, *s.* A light made of wax or tallow, surrounding a wick of flax or cotton.

Candles, as well as lamps, often afford good prognostics of weather. When the flames of candles flare and snap, or burn with an unsteady or dim light, rain, and frequently wind also, are found to follow. The excrescences from the wicks called funguses also denote rain and wind.—*Foster.*

CANE, *s.* A kind of strong reed; the plant which yields the sugar; a lance. Canes are sometimes used for fishing-rods.

CANELLA-ALBA, *s.* An aromatic stimulant.

CANINE, *a.* Having the properties of a dog.

CANKER, *s.* A worm that preys upon, and destroys fruits; a fly that preys upon fruits; any thing that corrupts or consumes; an eating or corroding humour; corrosion, virulence; a disease in trees.

Canker in the ear.—A common and troublesome disease, to which dogs are liable. To cure it, boil two ounces of best shag tobacco in a quart of water, until one pint is consumed;

dip the dog's ears, as it is boiling hot, into the tobacco water, until two inches above the cankered part; repeat it three successive days. To bring the hair again, burn some old shoe, and mix with a quarter of a pound of hog's-lard, and frequently anoint the ears; but the readiest and best way to rid dogs of cankers, is to apply the rounding-iron.

* * *

In the early stages, a wash composed of half a drachm of superacetate (sugar) of lead, dissolved in four ounces of rose or rain water, is often all that is necessary. A small teaspoonful may be introduced (previously warmed to a blood heat, to prevent surprise) night and morning, rubbing the root of the ear at the same time, to promote the entrance of the wash into the cavities. In more obstinate cases, it is prudent to add fifteen or twenty grains of vitriolated zinc (white vitriol) to the wash; and if, instead of water, a decoction of oak bark is made use of to form the wash, it will greatly promote the end desired. In some cases, acetate of copper (verdigris), mixed with oil, has proved beneficial when introduced in the same manner. In others, submuriate of quicksilver (calomel) and oil have produced amendment in the same way. A *very* weak injection of the oxymuriate of quicksilver (corrosive sublimate) has succeeded when every other application has failed. A very mild injection of nitrate of silver, as one grain to two ounces of water, has done much good also.

* * *

Canker on the outside of the ear consists of an ill-disposed ulcer, which is usually situated on the lower edge of the flap or pendulous part of one or both ears, dividing it into a kind of slit. It seems to itch intolerably, and is therefore kept in a continual state of aggravation by the shaking of the dog's head. An unguent, made with equal parts of ointment of nitrated quicksilver and calamine cerate, may be applied once a day, carefully securing the ear from the injury occasioned by the shaking of the head, by a sort of head dress, during its use. Or the following may be tried:—

Oxymuriate of quicksilver (corrosive sublimate) very finely powdered . .	3 grains
Cerate of calamine (Turner's cerate) . . .	1 drachm
Sublimated sulphur (milk of)	1 scruple.

In some cases, the oxymuriate of silver has become more efficacious in a wash, six grains being dissolved in four ounces of water. Strong astringent lotions are sometimes useful; as alum dissolved in a decoction of oak bark. When the disease proves very obstinate, excision must be resorted to, taking care that the whole, not only of the immediate cracked part, but also of its tumefied edges, are included in the operation.

* * *

In tumefied flap of the ear, the tumour ought either to be opened its full length, and a pledget of lint introduced, to prevent too hasty a union of the outer edges of the sac; or a seton should be introduced, embracing the whole of the tumour, which should be suffered to remain for a week or ten days. By this means, instead of a discharge of serum, healthy matter will form in a little time; the sides will granulate and unite, and on the removal of the seton, the external lips of the wound will close firmly and healthily.—*Blaine.*

CANKER, *v.* To corrupt, to corrode; to infect, to pollute.

CANOA, or CANOE, *s.* A boat made by cutting the trunk of a tree into a hollow vessel; a very light boat.

The Poole canoe is built sharp at both ends, on the plan of the Greenland whale-boat, except being so flat at the bottom as to draw only two or three inches of water, and so light as to weigh only from sixty to two hundred pounds. In making all canoes for gunning, the builder should be careful to have the bottoms of them a little rounded (say about half an inch of convex "a-midships," for a bottom three feet broad); and, what is of still more consequence, a little "kammelled," or sprung; that is, gradually rising "fore and aft," in order to "give them life." They will, otherwise, row miserably heavy, and, when they get aground, suck the mud or sand so much, that, in order to get them off again, you might be forced to stand up, and this would frighten away the fowl. If, however, the bottom of a canoe is too much kammelled, she will never keep steady in going to birds. Some people, for this reason, leave hollow grooves between the bottom planks. I should say, that to every five feet of plank I would give about one inch of "kammel;" so that the bottom of the canoe being ten feet, would, by holding a string along the centre of the bottom, outside, prove convex about two inches. If a little more, she would be none the worse; perhaps the better, provided that she drew water enough to give a bearing to every part; otherwise the ends that were sprung, would, by being out of the water, "cluck" so much as to make birds swim away in the night. In short, let your draught of water be the chief

guide to regulate the kammelling, or springing, of your punts and canoes. If not required for rough work, or a fixed swivel-gun, I should recommend all the planks to be not more than three quarters of the thickness specified in the plate; as nothing, provided it be perfectly safe, can be too light for getting to wild birds. It is the large size of a boat, not the substance of the wood, that makes her safe in a sea. If the builder puts some oakum and tar round the heads of the principal nails, before he drives them in, so much the better.—*Hawker.*

CANTER, *s.* A short gallop.

The chief paces for a hack to carry a gentleman are the walk and the canter. A very quick trot is a most ungentlemanlike pace, and only fit for a butcher; besides which, it wears out a horse much sooner than a canter, from the weight being all thrown upon one fore leg at the same time; whereas, in the canter, it is equally divided between both. Added to this a canter is much more easy, as well as safer to the rider, the horse having his haunches more under him than when he trots, thereby more likely to recover himself in case of making a mistake, which the best is sometimes subject to. Fast trotting also distresses a horse more than cantering, because in the one he is going up to the top of his speed, and in the other much below it.—*Nimrod.*

CANTHARIDES, *s.* Spanish flies, used to raise blisters.

These insects are found adhering to trees of different kinds in France, Germany, and Spain: those from the latter country are considered the best.

Cantharides are so very acrimonious, that they inflame and excoriate the skin; and hence raise a more perfect blister than any other substance: this property renders them extremely useful in veterinary practice, in which a good *blister* is the most important of all external remedies. Cantharides should be finely powdered; but previously to this operation they should be sifted, that they may be free from a great deal of dust and useless matter, which we generally observe with them. When powdered, they may be either formed into an ointment, a liniment, or a spirituous tincture; but the former is the best form, and most commonly used. (See BLISTERS.)

Cantharides are imported from Sicily and Astracan, in sacks and small chests. The best are of a lively fresh colour, a small size, and not mouldy, nor mixed with the *Melolontha vitis;* an insect resembling them in some degree, but possessing no vesicating property. It may be distinguished by its form, which is more square than that of the Spanish fly, and by its black feet. If Spanish flies have been properly dried and kept in a well-stopped glass bottle, they retain their acrimony, and remain unchanged a great length of time; but sometimes they are attacked by a small worm, which, however, feeds on the inactive part only of the fly, reducing it to a powder that still possesses the active quality of the entire insect. They soon putrify when kept in a damp place, and therefore should be occasionally spread out to the air.—*Thomson's London Dispensatory.*

CANTLE, *s.* A piece with corners. The hinder part of the saddle.

CAP, *s.* A strong covering for the head, formerly worn by huntsmen—hats are now preferred by gentlemen riders. *Vide* COPPER.

CAPARISON, *s.* A sort of cover for a horse; generally horse furniture.

CAPELOT, *s.* A swelling on the hock; it is harmless, but incurable.

CAPERCALZIE, (*Urogallus vulgaris*, FLEM.), *s.*

The male of this species is polygamous, and lives separate from the females, except in the breeding season. Their manner and habits are very like those of the black grous, except that this seems to be confined wholly to forests of pine, on the tender shoots of which it feeds. It was formerly to be met with in Scotland and Ireland, but is now extinct.

The female is said to lay from eight to sixteen eggs, of a white colour, spotted with yellow, larger than those of our domestic fowl. Dr. Latham says, he is well informed the nest of one found in Scotland was placed on a Scotch pine; if so, it differs from all the genus, who are known to lay their eggs on the bare ground.

It is not uncommon in the pine forests of Norway, whence we have received it. It is also found plentiful in Russia and Siberia, in Italy, and several parts of the Alps. It formerly frequented the fir woods of Ireland and Scotland, and was last seen in 1760, in the woods of Strathglass. It continued in Strathspey till 1745. Recent attempts have been made to re-introduce the species from Norway without success.—*Montagu.*

CAPISTRUM, *s.* In ornithology, is a word used by Linnæus to express the short feathers on the forehead just above the bill. In some birds these feathers fall forward over the nostrils: they quite cover those of the *crow*.

CAPIVI, *s.* A balsam. It has been lately introduced into veterinary practice.

CAPON, *s.* A castrated cock.

The Chinese are said to be particularly skilful in this operation, the outline of which, according to their mode, I give as a matter of curiosity. The wings of the fowl are folded back till they meet, and the left foot of the operator is placed upon them, the great toe of his right foot pressing upon the legs to keep them fast. After pulling the feathers, an incision is made, one inch long, and one inch from the spine, obliquely downward and forward.

After the operation, instead of being melancholy, abashed, and humiliated, the capon assumes a bold, lofty, and triumphant air; and such is the influence of audacity over all animals, that his borrowed courage completely imposes on the cocks and hens, and prevents them from disturbing him in the fulfilment of his charge. At first, he is a little awkward in the exercise of his office. His ambition, in imitating in his gait, the majesty and dignity of the cocks, makes him carry his head too stiff, and prevents him from seeing the chickens, which he sometimes thus inadvertently tramples under foot. But experience soon teaches him to avoid such mishaps, and accidents of the same kind do not occur again.—*Moubray.*

CAPOT, *s.* Is when one party wins all the tricks of cards at the game of piquet.

CAPRIOLE, *s.* *Caprioles*, in the old menage, are leaps such as horses make in one and the same place, without advancing forwards.

CAPSICUM, *s.* The pod from which cayenne pepper is produced; a powerful stimulant.

CAR, *s.* A small carriage of burden.

CARABINE, or CARBINE, *s.* A small sort of musket. It is shorter in the barrel and smaller in the bore.

CARAWAY, *s.* A plant.

The seeds are cordial and carminative, and from them an *essential oil* is obtained for veterinary purposes. The dose is from half a drachm to a drachm, and may be mixed either with ale, milk, or water, into a drench; or formed into a ball with powdered liquorice, powdered ginger, and honey.

Caraway is a useful cordial and carminative. The dose of *the seed* is about an ounce; to which may be added a drachm or two of powdered ginger.

From twenty to thirty drops of oil of caraway are a useful addition to aloes, making a purgative ball; or, as it is commonly termed, a dose of physic.

Though the essential oil is the most convenient form for giving caraways, it is not perhaps so grateful to the stomach, or likely to produce so gradual or durable a stimulus as the recently powdered seeds. Caraways lose their power by long keeping, especially in damp places. When the essential oil is employed, the best manner of mixing it is to rub it in a mortar with sugar and treacle, and to add the ale or water gradually. Or it may be mixed in the proportion of one part of the oil to two of spirit of wine, and kept as an essence of caraway: this, when mixed with ale or water, will be more uniformly diffused through the liquor than the oil alone, which will immediately float on the surface.—*White.*

CARDAMOM-SEEDS, *s.*

There are two sorts of cardamoms, the greater and lesser: the latter are commonly sold in their shells or pods, from which they are easily freed. These are preferred in medical practice, probably on account of their more grateful smell and taste, but the larger sort, which are generally termed grains of paradise (*see* GRAINS OF PARADISE), are better for veterinary purposes, being a stronger stimulant, and much cheaper.—*White.*

CARDS, *s.*

The general opinion respecting the origin of playing-cards is, that they were first made for the amusement of Charles VI. of France, at the time he was afflicted with a mental

derangement, which commenced in 1392, and continued for several years. In proof of this supposition, an article in the treasury registers belonging to that monarch is quoted, which states that a payment of fifty-six sols was made to Jacquemin Gringonneur, painter, for three packs of cards gilded and painted with divers colours and different devices, to be carried to the king for his diversion.

In Spain, as early as A.D. 1387, John I., king of Castile, in an edict, forbade playing of cards and dice in his dominions. The provost of Paris, January 22, A.D. 1397, published an ordinance, prohibiting the manufacturing part of the people from playing at tennis, dice, cards, &c. which has inclined several modern writers upon this subject to refer the invention of cards from France to Spain; and the names of some of the cards, as well as of many of the most ancient games, being evidently derived from the Spanish language, are justly considered as strong corroborating arguments in favour of such an opinion.

A very intelligent writer upon the origin of engraving, Baron Heineken, asserts, that playing-cards were invented in Germany, where they were used towards the latter end of the fourteenth century; but his reasons are by no means conclusive. He says they were known there as early as the year 1376.

At the time that cards were first introduced, they were drawn and painted by the hand without the assistance of a stamp or plate; it follows of course that much time was required to complete a set or pack of cards; and the price they bore, no doubt, was adequate to the labour bestowed upon them, which necessarily must have enhanced their value beyond the purchase of the under classes of the people. For this reason it is, I presume, that card-playing, though it might have been known in England, was not much practised until such time as inferior sets of cards, proportionably cheap, were produced for the use of the commonalty, which seems to have been the case when Edward IV. ascended the throne, for in 1463, early in his reign, an act was established, on a petition from the card-makers of the city of London, prohibiting the importation of playing-cards; and soon after that period card-playing became a very general pastime.

The increasing demand for these objects of amusement, it is said, suggested the idea of cutting the outlines appropriated to the different suits upon separate blocks of wood, and stamping them upon the cards; the intermediate spaces between the outlines were filled up with various colours laid on by the hand. This expeditious method of producing cards reduced the price of them, so that they might readily be purchased by almost every class of persons. The common usage of cards was soon productive of serious evils, which all the exertions of the legislative power have not been able to eradicate.

Carminative, *s.* Carminatives are such things as dispel wind, and promote insensible perspiration.

The disorders for which carminatives are employed are flatulent or spasmodic colic, gripes, fret, and botts.

CARMINATIVE MIXTURES.

1. Best Cognac brandy . . 4 to 6 oz.
   Hot water . . . . 10 or 12 oz.

Mix for one dose.

2. Anodyne carminative tincture . . . 2 to 4 oz.

(The receipt for this tincture will be found under the article Anodyne.)

   Hot water . . . . 8 or 10 oz.

Mix.

3. Tincture of opium . . ½ to 1 oz.
   Essence of peppermint (*see* Peppermint) . 1 dr.
   Water . . . . . 10 or 12 oz.
4. Oil of turpentine . . . 4 oz.
   Gruel . . . . . 10 or 12 oz.

Mr. Bracey Clark recommends, above all other remedies, a tincture of allspice, made by digesting one pound of bruised allspice in three quarts of proof spirit. Of this he gives four ounces in a little water every hour until the horse is relieved.

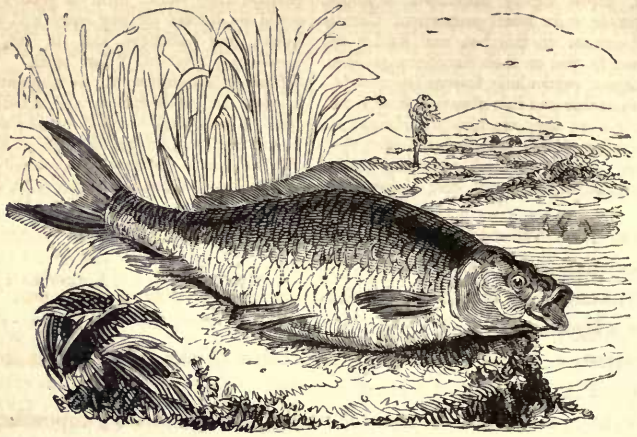
Carminative, *a.* Belonging to carminatives.

Carnivorous, *a.* Flesh-eating; a term applied to birds and animals.

Carnivorous birds are distinguished by those endowments and powers with which they are furnished by nature for the purpose of procuring their food. They are provided with wings of great length, the muscles which move them being proportionally large and strong; whereby they are enabled to keep long upon the wing, in search of their prey. They are armed with strong hooked bills, and sharp and formidable claws. They have also large heads, short necks, strong and brawny thighs, and a sight so accurate and piercing, as to enable them to view their prey from the greatest heights in the air, upon which they dart with inconceivable swiftness and undeviating aim. Their stomachs are smaller than those of the granivorous kind, and their intestines are much shorter.—*Bewick.*

CAROTID, *s.* Two arteries which arise out of the ascending trunk of the aorta.

CARP, *s.* A pond and river fish, very abundant in Great Britain.



The carp is the queen of rivers; a stately, a good and a very subtle fish; that was not at first bred, nor hath been long in England, but is now naturalised. It is said, they were brought hither by one Mr. Mascal, a gentleman that then lived at Plumsted in Sussex, a county that abounds more with fish than any in this nation.

Carps and loaches are observed to breed several months in one year, which pikes and most other fish do not. And this is partly proved by tame and wild rabbits: and also by some ducks which will lay eggs nine of the twelve months; and yet there be other ducks that lay not longer than about one month. And it is the rather to be believed, because you shall scarce or never take a male carp without a melt, or a female without a roc or spawn, and for the most part very much, and especially all the summer season. And it is observed, that they breed more naturally in ponds than in running waters, if they breed there at all; and that those that live in rivers are taken by men of the best palates to be much the better meat.

I told you that Sir Francis Bacon thinks that the carp lives but ten years: but Janus Dubravius has writ a book *Of Fish and Fish Ponds*, in which he says, that carps begin to spawn at the age of three years, and continue to do so till thirty: he says also, that in the time of their breeding, which is in summer, when the sun hath warmed both the earth and water, and so apted them also for generation, that then three or four male carps will follow a female; and that then, she putting on a seeming coyness, they force her through weeds and flags, where she lets fall her eggs or spawn, which sticks fast to the weeds; and then they let fall their melt upon it, and so it becomes in a short time to be a living fish: and, as I told you, it is thought that the carp does this several months in the year.—*Walton.*

CARRIER, *s.* One who carries something; a species of pigeons.

CARRION, *s.* The carcass of something not proper for food; flesh corrupted. Relating to carcasses.

CARRION CROW, (*Corvus corone*, LINN.; *Le Corneille*, BUFF.) *s.*

The carrion crow is less than the raven, but similar to it in its habits, colour, and external appearance. It is about eighteen inches in length; its breadth about three feet. Birds of this kind are more numerous and as widely spread as the raven. They live mostly in woods, and build their nests on trees. The female lays five or six eggs, much like those of a raven. They feed on putrid flesh of all sorts; likewise on eggs, worms, insects, and various sorts of grain. They live together in pairs, and remain in England during the whole year.—*Bewick.*

Carrot, *s.* A garden root.

The varieties of food, as I have termed them, are such articles as, by their saccharine matter, prove highly nutritious, although their gluten is in small proportion. Carrots stand foremost on this list, and hardly too much can be said on their excellent qualities. They appear particularly favourable to condition, as the skin and hair always look well under their use: they are highly nutritious, as we know from the fat accumulated when they are used; and so favourable are they to the free exercise of the lungs, that horses have been found even to hunt on them: and, in conjunction with a certain portion of corn, perhaps they would form as good a food as could be devised for our coach and machine horses, our hackneys, and, in fact, for all horses not used on "fast work." In the *Museum Rusticum* is an account of two hunters fed with carrots and small loaves made of barley and oatmeal mixed; and these horses were said to be the pride of the field. Agricultural horses may be supported on them wholly, when sliced and mixed with chaff.

Cart, *s.* A wheel-carriage, used commonly for luggage.

Cart-horse, *s.* A coarse unwieldy horse.

Cartilage, *s.* A smooth and solid body, softer than a bone, but harder than a ligament.

Cartouch, *s.* A case of wood, three inches thick at the bottom, holding balls. It it fired out of a small mortar.

Cartridge, *s.* A case of paper or parchment filled with gunpowder, used for the greater expedition in charging guns.

Cascarilla, *s.* A tonic bark. Dose from one to three drachms.

Case, *s.* Condition with regard to outward circumstances; in physic, state of the body; condition with regard to leanness or health.

Case, *v.* To put in a case or cover; to cover as a case; to strip off the covering; to unskin.

Caseworm, *s.* A grub that makes itself a case.

Cassia, *s.* A sweet spice.

Cassino, *s.* A game at cards.

Cassino is generally played by four persons, but occasionally by three or two; the points consist of eleven, and the lurch is six.

The points are thus calculated:—

That party which obtains the great cassino, or ten of diamonds, reckons	2 points.
Ditto little cassino (the deuce of spades)	1
The four aces one point each	4
The majority in spades	1
The majority in cards	3
A sweep before the end of the game, when any player can match all on the board, reckons	1

In some deals at this game, it may so happen that neither party wins any thing, as the points are not set up according to the tricks, &c., obtained, but the smaller number is constantly subtracted from the larger, both in cards and points, and if they both prove equal, the game commences again, and the deal goes on in rotation; when three persons play at this game, the two lowest add their points together and subtract from the highest; but when their two numbers together amount to or exceed the highest, then neither party scores.

LAWS.

The deal and partners are determined by cutting, as at whist. The dealer gives four cards, by one at a time, to every player, and either regularly, as he deals, or by one, two, three, or four at a time, lays four, face upwards, on the board, and after the first cards are played, four others are to be dealt to each person till the pack is out; but it is only in the first deal that any cards are to be turned up.

The deal is not lost when a card is faced by the dealer, unless in the first round, before any of the four cards are turned up on the table: but should a card be faced in the pack before any of the said four are turned up, then the deal must be begun again.

Any person playing with less than four cards must abide by the loss, and should a card be found under the table, the player whose number is deficient is to take the same.

Each person plays one card at a time, with which he may not only take, at once, every card of the same denomination on the table, but likewise all that will combine therewith; as, for instance, a ten takes not only every ten, but also nine and ace, eight and deuce, seven and three, six and four, or two fives; and if he clear the board before the conclusion of the game, he scores a point. When a player cannot pair or combine, he is to put down a card.

The number of tricks are not to be examined or counted before all the cards are played, nor may any trick but that last won be looked at, as every mistake must be challenged immediately.

After the pack is dealt out, the player who obtains the last trick sweeps all the cards remaining unmatched on the table.

RULES.

The principal objects are to remember what has been played; and when no pairs or combinations can be made, to clear the hand of court cards, which cannot be combined, and are only of service in pairing or in gaining the final sweep: but should no court cards be left, it is best to play any small ones, except aces, as thereby combinations are often prevented.

In making pairs and combinations a preference should generally be given to spades, as obtaining a majority of them may save the game.

When three aces are out, take the first opportunity to play the fourth, as it then cannot pair; but when there is another ace remaining, it is better even to play the little cassino, that can only make one point, than to risk the ace, which may be paired by the opponent, and make a difference of two points; and if great cassino and an ace be on the board, prefer the ace, as it may be paired or combined, but great cassino can only be paired.

Do not neglect sweeping the board when an opportunity offers; always prefer taking up the card laid down by the opponent, and as many as possible with one card; endeavour likewise to win the last cards or final sweep.

While great or little cassino is in, avoid playing either a ten or a deuce.

When you hold a pair, lay down one of them, unless when there is a similar card on the table, and the fourth not yet out.

Attend to the adversaries' score, and, if possible, prevent them from saving their lurch, even though you otherwise seemingly get less yourself, particularly if you can hinder them from clearing the board.

At the commencement of a game, combine all the cards possible, for that is more difficult than pairing; but when combination cannot be made, do not omit to pair, and also carefully avoid losing opportunities of making tricks.—*Hoyle.*

CAST, *v.* To admit of a form by casting or melting; to warp, to grow out of form; to direct the hunting of a dog.

When hounds are at fault, staring about and trusting to their eyes and ears, a forward cast is the least likely to regain the scent; the place where they left is the most probable spot for them to hit the scent, and hounds knowing where they left the scent, will there try to recover it, nor is a wide cast often to be made without good reason; the scent should be tried to be retrieved by crossing the line of it, and a huntsman, by attending to this, will not fail to make a good cast, if he observes the point of the fox. When hounds cannot hit off a fault by themselves, the first cast should be speedy; the scent is then good, and hounds not likely to go over it. Every huntsman should adopt these rules; with a good scent his cast should be quick, with a bad scent, slow, and when hounds are picking along a cold scent, he is not to cast them at all.

* * *

Hounds that are all well taught will cast forward to a hedge of their own accord. Time ought always to be allowed them to make their own cast; it is impertinence in a huntsman to prevent them, and prudence should induce him to humour his hounds in the cast they seem inclined to make, and either to stand still, or trot round with them, as circumstances may point out. Different countries require different casts; in an open country, wide casts are always necessary; in casting round a flock of sheep, the whipper-in ought to drive them the other way, lest they keep running on before the hounds; in every cast a huntsman should make it perfect one way, before he tries another.—*Daniel.*

CAST, *s.* The act of casting or throwing: a throw; state of any thing cast or thrown; the throw of dice; chance from the cast of dice; a mould, a form; a shade, or tendency to any colour; manner, air, mien; a flight of hawks.

CASTER, *s.* A thrower, he that casts.

Castile Soap, *s.* A kind of soap.

Casting-net, *s.* A net to be thrown into the water by hand.

The casting-net may be successfully employed in a certain depth of water, viz. gudgeon net at four, and large meshed casting net from six to eight feet: in the making great attention must be paid to putting in the widenings, or the net will never open freely, however skilful the person that throws it. In preparing it for casting, it must not be taken upon the shoulder so short as to prevent the leads having their proper swing, which is to be aided by the corresponding turn of the caster's body, at the exact moment of delivering it from his arm; and the first object is, to let the leads all break the surface at once. Many persons jerk one part of the net high in the air (which assists the spreading), whilst the other part of the lead line drops close to the caster's foot, making a variation of some seconds in the fall of the different leads into the water: fish must be very crowded, or extremely sleepy, if they remain within the curtailed range and slow sinking of a net so cast. The nicety of the art is, to be able to cover any particular spot, and to shape the net accordingly; and no one can be deemed a proficient, unless he is an ambidexter, and throws from either shoulder, as the turning and holes in a river may require.

For carp or large fish, the mesh should be an inch and three quarters, and the circumference of the lead line not less than twenty-four yards, and from that to twenty-eight; if made of silk, it will sink more speedily, and of course will admit to be thrown with success in deeper water and more weeds. By baiting a place in ponds with grains, worms, or graves, the fish may be collected, and the casting-net thrown over them: should there be much mud, let the net remain quiet some minutes, and the fish will rise from the mud, into which they may have sunk themselves at the noise of the net. * *

N. B.—A piece of crumb of bread put into the stomach of either carp or tench suspected to be tainted with the mud, will absorb all the disagreeable taste, and should be taken out before they are sent to table.

Castle, *s.* *Vide* Chess.

Castor Oil, *s.* Oil made from the beaver.

A useful laxative in cases where it is necessary to open the bowels, and at the same time avoid irritation: it is therefore extremely proper in fevers accompanied with costiveness, particularly when there appears to be pain and irritation in the bowels, and may be given with four or six ounces of Epsom salts.

The dose is from half a pint to a pint, or a pint and half.—*White.*

Castrate, *v.* To geld.

Castration is performed in various ways, but in all it expresses the removal of the testicles: there are methods of rendering the animal impotent without the actual ablation of these organs; for if by any other method the secretion of the spermatic glands is prevented, from which the uncontrollable sexual excitements arise, the end is answered.

Castration by cauterization is the method which has been principally practised among us; and as it is that taught at our alma mater, we may naturally suppose it has proved worthy of the patronage it has received. It is that I always practised, and was successful with it. But this by no means proves it the best; although good it must be, since I never had an untoward case in it; and the more, as, when I was called on to perform it, it was usually on adult horses, mostly on aged ones. Other plans may be still better: it is my duty, assuming as I do, to be a teacher, to bring them forward to view, that they may be compared together. A preliminary observation should be made previously to castrating, to see that the horse has no hernia or rupture: such cases have happened; and as in our method we open a direct communication with the abdomen, when the horse rises it is not improbable that his bowels protrude until they trail on the floor.

If a colt cannot be enticed with oats, &c., he must be driven into a corner between two steady horses, where, if a halter cannot be put on, at least a running hempen noose can be got round his neck; but, whichever is used, it should be flat, or the struggles, which are often long and violent, may bruise the neck, and produce abscess or poll evil. When his exertions have tired him, he may be then led to the operating spot: here his attention should be engaged while the hobbles are put on, if possible; if not, a long and strong cart-rope, having its middle portion formed into a noose sufficiently large to take in the head and neck, is to be slipped on, with the knotted part applied to the counter or breast, and the long pendent ends passed backwards between the fore legs, and, as expressed by Mr. Percivall, 'extended obliquely backward, carried round the hind fetlocks within the hollows of

the heels, brought forward again on the outside, passed under the collar rope, and a second time carried backwards over the outside of all, and extended to its full length in a direct line behind the animal.' Thus fettered, Mr. Percivall says his hind feet may be drawn under him towards the elbows; I have, however, often found that, at the moment the rope touches the heels, the colt either kicks and displaces the rope, or altogether displaces himself; but his attention can generally be engaged by one fore leg being held up, or by having his ear or muzzle rubbed, or even by the twitch: if not, the rope may be carried actually around each fetlock, which then becomes a hobble; and this rope may be gradually tightened: in this way I have succeeded with very refractory colts; but it requires very able assistants, and, if possible, the man who has been used to the individual colt should be present. In either way, as soon as the rope is fixed, with a man to each end of it, behind the colt, let them, by a sudden and forcible effort in concert, approximate his hind legs to his fore, and thus throw him. Before the colt is cast, however, it should be endeavoured to ascertain that he is free from hernia: with an adult horse this is even more necessary.

Being satisfied that no hernia exists on either side, proceed to cast the horse, turning him, not directly on the left side, but principally inclining that way; and if possible let the croup be very slightly elevated: it is usual to place him directly flat on the left side, but I have found the above rather more convenient. Every requisite being at hand, and as Hurtrel D'Arboval, with his usual minuteness, observes, the operator, having his scalpel between his teeth, should place himself behind the horse, as the most convenient way to perform his manipulations, and firmly grasping the left testicle with his left hand, and drawing it out so as to render the scrotum tense, he should make an incision lengthways of the bag, from its anterior to its posterior part, or, as expressed by Hurtrel d'Arboval, in the direction of the grand axis of the organ. The incision may be carried at once through the integuments, the thin dartos expansion, and the vaginal coat of the testicles, by the dexterous operator, with a sweep of the scalpel: but with one less *au fait* at the operation, it will be more prudent to make the first incision through the scrotum and dartos only, to the required extent, and then to do the same by the vaginal coat, thus avoiding to wound the testicle, which would produce violent resistance, and give unnecessary pain. The testicle, if the opening be sufficiently large, will now slip out; but the operator must be prepared, at the moment of so doing, to expect some violent strugglings, more particularly if he attempts to restrain the contractions of the cremaster, and by main force to draw out the testicle. Preparatory to this, therefore, the twitch should be tightened; the attendants, especially the man at the head, must be on the alert, and the testicle itself, at the time of this violent retraction of the cremaster, should be merely held, but not dragged in opposition to the contraction, otherwise peritonitis itself might be the result from any such violence. If the clams have been put on over the whole, according to Mr. Percivall's method, they will assist in retaining the retracting parts; but I must again offer a caution, that they be not used with too much pressure. The resistance having subsided, provided the clams have been thus employed, they must now be removed; or, if they have not been previously in use, they must now be taken in hand, and, being wadded with tow, should be placed loosely on the cord, while time is given to free the *vas deferens*, or spermatic tube, which is seen continued from the epididymis, from the grip of the pincers. The Russians, Mr. Goodwin informs us, cut it through when they operate. Hurtrel d'Arboval does not note it in the French practice; but humanity is much concerned in its removal from pressure, from the excess of pain felt when it is included. It is also necessary, before the final fixing of the clams, to determine on the part where the division of the cord is to take place. To use Mr. Percivall's words, " If it be left too long, it is apt to hang out of the wound afterwards, and retard the process of union;" indeed, I have known the end of it swell into a fungous excrescence, which greatly embarrassed the practitioner to destroy: on the other hand, if it be cut very short, and the arteries happen to bleed afresh after it has been relieved from the clams, the operator will find it no easy task to recover it from the retraction of the cremaster. The natural length of the cord, which will mainly depend on the degree of the descent of the gland, will be our best guide in this particular. The place of section determined on and marked, close the clams sufficiently tight to retain firm hold of the cord, and to effectually stop the circulation within it. There are now two modes of making the division; the one is to sever it with a scalpel, and then to sufficiently sear the end of it so as to prevent a flow of blood, avoiding, however, to burn it to a cinder, as is sometimes done. The other, and in some respects the preferable method, is to employ an edged firing-iron, which is to divide it by little crucial sawings, so that, when the cord is separated, it shall not present a uniform divided surface, but ragged edges, which will more perfectly destroy the mouths of the vessels, and tend to lessen the

chances of hæmorrhage. This done, loosen the clams sufficiently to observe whether there be any flow of blood; gently wipe the end of the cord also with the finger, as sometimes an accidental small plug gets within the vessel, which afterwards is forced out, and therefore had better be removed by this means and at this time. Retain a hold on the clams a few minutes longer; and while loosening them gradually, observing to have an iron in readiness again to touch the end of the cord, if any blood makes its appearance. Satisfied on this point, sponge the part with cold water, but by no means dash it over them, as has been done; neither is any external application necessary, still less any resin seared on the end of the cord, which can only irritate, and will never adhere. On the after-treatment much difference of opinion has existed, and even yet exists. The powerful evidence of accumulated facts has now convinced veterinarians of both the necessity and propriety of some motion for the newly-castrated horse as a preventive of local congestion; such practice is common in most countries but our own, and seems salutary in all. Hurtrel d'Arboval, thus impressed, recommends the horse, immediately after the operation, to be led out to walk for an hour, and it is a general plan in France to walk such horses in hand an hour night and morning. Mr. Goodwin, in proof of its not being hurtful, informs us, that whole studs of horses brought to St. Petersburgh to be operated on, are immediately travelled back a certain portion of the distance, night and morning, until they arrive at home. I have, therefore, no hesitation in recommending a moderate degree of motion in preference to absolute rest, as practised among us: it is a plan which has long been followed with success among our own cutters; and perhaps our not adopting it before has arisen from prejudice against whatever was practised by illiterate persons, without reflecting that, illiterate as they are, their employers are not all so; and that, unless success attended their practices, they would cease to be employed.

For the French mode, twitching, &c., *vide* GOODWIN, BLAINE, &c.

* * *

When a colt is to be gelded.—In the first or second week in June he should be cut; and when recovered he should be turned out for the summer.

* * *

"I would not operate," says Mr. Percivall, "during the season of changing the coat, nor even just prior to that period, from fear of interrupting the process, or checking it altogether; neither would I choose frosty or sultry weather: but, above all, it is advisable to suspend the operation when the flies abound. If the subject have passed the colt period of age, I would recommend a dose of aperient medicine before the operation be undertaken, unless he should be already living on green food." * * *

Each testicle should be taken out of the scrotum separately, by an opening sufficiently large, when a ligature should be applied, moderately tight only, around the spermatic chord, about an inch and a half beyond its insertion into the testicle; the separation should then be effected by the scalpel or knife, between the ligature and testis. It is sometimes performed without the ligature, by making the division of the chord with a red-hot knife, but the other is the neatest and safest mode. * * *

The castration of cats is sometimes practised to keep them from roving, or to increase their size. For this purpose nothing more is requisite than to make a slight opening on each side the scrotum, to slip out the two testicles, and draw them away with the fingers. The rupture alone of the spermatic chord prevents hæmorrhage in them, and no future inconvenience is felt. It is often found difficult to secure a cat for this operation; but it may be easily managed in two ways:—one by putting the head and fore-quarters of the animal into a boot; the other by rolling his whole body lengthways in several yards of towelling; but the former is the most secure and simple, for no animal is more intractable, as a surgical patient, than grimalkin: though to administer medicines to a pig beats the cat hollow, as an obstreperous operation.—*Blaine—Nimrod—Percivall.*

CASTRATION, *s.* The act of gelding.

CASTERIL, or CASTREL, *s.* A mean or degenerate kind of hawk.

CAT, *s.* A domestic animal that catches mice.

The cat is a faithless domestic; though gentle and frolicsome when young, they even then possess an innate cunning, and perverse disposition, which age increases, and education only serves to conceal.

The form and temperament of the cat's body perfectly correspond with his disposition; he is handsome, light, adroit, cleanly, and voluptuous; he loves ease, and searches out the softest places for rest and repose. The cat is very amorous. The passion of the female continues nine or ten days, and commonly happens only twice a year, in the spring and autumn, but sometimes three and even four

times. They go with young 55 or 56 days, and they usually have from four to six at a litter. As the males are apt to devour their progeny, the females commonly conceal themselves when they litter, and if suspicious of a discovery, they carry their young ones away in their mouths and hide them in holes or inaccessible places. After suckling them a few weeks, the old one takes them mice or small birds, to accustom them to eat flesh; but by an unaccountable caprice, these very mothers so tender and careful, become sometimes so cruel and unnatural, as to devour their offspring themselves.

Cats are without docility, and their scent, which, in the dog is so eminent a quality, is very indifferent, and therefore they hunt by the eye only; neither do they properly pursue, but rather lie in wait and attack the animals by surprise; and after having played with, and tormented them a long time, they kill them without any necessity, even when well fed, and in no want of prey to satisfy their appetites.

The most immediate physical cause of their inclination to seize other animals by surprise, comes from the advantage they receive from the particular formation of their eyes. The pupil in man, and many other animals, is capable of a certain degree of contraction and dilation; it enlarges a little when the light is faint, and contracts when it becomes too strong; in cats and nocturnal birds, as owls, &c., this contraction and dilation is so considerable that the pupil, which in the dark is large and round, becomes in the day long and narrow like a line; and therefore these animals see better in the night than in the day. There is a perpetual contraction in the eye of the cat during the day, and it is only by a great effort that he can see in a strong light, whereas, in the twilight, the pupil resumes its natural form; he sees perfectly, and profits from this superiority to know, attack, and surprise his prey.

Cats have less attachment to persons than to houses. When taken to the distance of a league or two they will return to their former abode of their own accord. They fear water, cold, and bad smells; they love to be in the sun, and to lie in warm places; they are very fond of perfumes, and willingly allow themselves to be taken and caressed by those who make use of them. They do not come to their full growth in less than fifteen or eighteen months, but they are capable of engendering before the end of the first year, and they can procreate all their lives, which seldom exceeds eight or nine years; they are notwithstanding, very lively and hardy, and more nervous than most other animals which live longer.

The wild cat couples with the domestic one, and they consequently form but one species. It is not uncommon for both males and females to quit their houses, when they are proud to go into the woods to seek wild cats, and afterwards return to their former habitations; it is for this reason that some of our domestic cats so entirely resemble the wild ones. The greatest difference between them is internally, the intestines of the domestic cat being longer than those of the wild cat, although the latter is much the largest and strongest; his lips are also always black, his ears more stiff, his tail larger, and his colour more uniform.

In general cats are not, like dogs, subject to degenerate when transported into warm climates. Their nature is indeed more constant, and as their domestic state is neither so entire, universal, nor perhaps so ancient as that of the dog, it is not surprising that they should have undergone less variation.

* * *

Besides this large and ferocious species, the warrens upon the coast suffer much injury from the common cat becoming wild and burrowing in the rabbit-holes. They are sometimes surprised and shot in the sand-banks, or taken in traps; but they are generally too wary to be approached—and hunting only by night, during the day they sleep in their dens, and are rarely met abroad.

Some estimate of their numbers may be formed, from the circumstance of five males having been killed in a herdsman's outhouse which joined the warren. They had been attracted there by one of their own species, and the noise having alarmed the peasant, he guessed the cause, and cautiously managed to stop the hole by which they gained entrance, with a *turf-cleave*. Knowing the value of the capture, he kept guard upon the prisoners till morning, and then despatched information to the Lodge. My cousin, with his followers, promptly repaired to the place, and surrounding the barn with guns and greyhounds, bolted the wild cats successively, until the whole number were despatched. This *chassé* was not only novel, but profitable. After the death of their persecutors, the rabbits increased prodigiously; but fears are entertained that these destructive animals are become once more abundant in the sand-banks.

* * *

Cats are said, when they wash their faces, or when they seem sleepy and dull, to foretel rain. The same is said of them when they appear irritable and restless, and play with their tails.—*Buffon—Wild Sports—Foster.*

Cataplasm, *s.* A poultice.

Cataract, *s.* An inspissation of the crystalline humours of the eye; sometimes a pellicle that hinders the sight.

Catarrh, *s.* A defluction of a sharp serum from the glands about the head and throat.

Caterpillar, *s.* A worm sustained by leaves and fruits.

Cathartic, *s.* A medicine to purge downwards.

Cathartics are a most important class of medicines, and of all cathartics Barbadoes aloes is the best. Cathartics improve digestion and chylification, by cleansing the intestines and unloading the liver, and if the animal is afterwards properly fed, will improve his strength and condition in a remarkable degree. Cathartics are always useful when the appetite and digestion are bad, and this is known by a voracious or depraved appetite, both for food and for water; rumbling of the bowels, and a frequent discharge of wind from the anus. This is the case in a remarkable degree with broken-winded horses, and generally in such as have chronic cough, or are crib-biters. They should not be given too strong or too frequently, as they might thereby weaken instead of strengthening the digestive organs, and produce the effect they were intended to remove. Cathartics should always be made with soap, in the following manner, and then, if given upon an empty stomach, they will be carried off, and will not be dissolved until they get into the large bowels, where their effect is intended to be produced: that is carrying off all the excrementitious matter that may be lodged in them. When given in this way they never produce sickness or pain in the stomach, but always operate without pain or danger.

CATHARTIC BALL.

Barbadoes aloes powdered, from	5 dr. to 1 oz.
Hard soap	3 to 4 dr.
Ginger	1 dr.
Water	1 dr.
Oil of cloves . . .	10 drops.

Beat the soap, oil of cloves, and water together in a mortar, so as to form a paste; if necessary use more water. Add the powdered aloes and ginger, and beat the whole into a ball.—*White.*

Cattle, *s.* Beasts of pasture, not wild or domestic.

Cavisson, *s.* A head-stall provided with a nose-band and ring, to which a long cord is attached. The cavisson is used in the earlier stages of horse-breaking.

Cauf, *s.* A chest with holes, to keep fish alive in the water.

Caustics, *s.* Medicaments which, by their violent activity, and heat, destroy the texture of the part to which they are applied.

The most powerful is the *actual*, or hot iron; but there are many other caustics possessed of great strength, which speedily destroy the parts to which they are applied. If a solid caustic is wanted, nothing is more convenient than the lunar caustic (nitrate of silver). Milder caustics are more frequently used; such as sulphate of copper, red precipitate, (nitric oxide of mercury,) burnt alum, &c.

Strong caustics are employed to destroy unhealthy or diseased parts; and for cleansing foul ulcers, so as to produce a healthy state, and render them curable by more simple applications. Caustics, divided into liquid and solid, are strong and mild. The mild are often called *escharotics*.

SOLID CAUSTICS, STRONG.

No. 1. The red-hot iron. (See Firing.)
2. Pure potash with lime.
3. Nitrate of silver, or lunar caustic.
4. Nitrate of copper.

MILD CAUSTICS, SOLID.

No. 1. Acetate of copper, or distilled verdigris.
2. Sulphate of copper, or blue vitriol.
3. Red nitrated quicksilver, red precipitate, or nitric oxide of mercury.
4. Burnt alum.
5. Common verdigris.

The *mild* require to be finely powdered and sprinkled on the ulcer; and are sometimes mixed with digestive ointments to increase their power.

STRONG CAUSTICS, LIQUID.

No. 1. The sulphuric and nitrous acids, which must be used cautiously: they may be diluted with a sufficiency of water, to be applicable to the purpose required.

2. Nitrous acid . . 1 oz.
Quicksilver . . ½ oz.

Place them in a large gallipot, or open phial, and avoid the noxious fumes which arise. When the quicksilver is perfectly dissolved, and the mixture cold, it may be put into a phial and corked.

This is a strong and efficacious caustic; a certain remedy for the foot-rot in sheep, and effectual in canker of the horse's foot, provided these complaints are properly managed in other respects. It is formed with melted hog's lard into a strong *detergent* ointment, or diluted with water.

No. 3. Nitrous acid . . 1 oz.
Verdigris . . ½ oz.—Mix.

This caustic is similar to the former, and applicable to the same purposes.

No. 4. Muriate of antimony, or butter of antimony.

5. Muriate of quicksilver, or sublimate . . . 1 dr.
Muriatic acid . . 2 dr.

This is a very powerful caustic, and always requires dilution. Yellow arsenic mixed with lime and grease, or hog's lard, is sometimes used as a caustic to destroy warts, or cure fistula or poll-evil.

MILD CAUSTICS, LIQUID.

No. 1. Solution of blue vitriol.
2. Any of the stronger caustics, except butter of antimony, diluted with an equal quantity, or more, of water.
3. Muriatic acid.
4. Muriate of iron.—*White.*

CAUTERIZE, *v.* To burn with the cautery.

CAUTERY, *s.* Cautery is either actual or potential; the first is burning by a hot iron, and the latter with caustic medicines.

CAW, *v.* To cry as the rook or crow.

CELLULAR, *a.* Consisting of little cells or cavities.

CEMENT, *s.* The matter with which two bodies are made to cohere.

CERATE, *s.* A plaster made of wax.

CERE, *s.* (*Cera*, LINN.) A term in ornithology for the naked skin which covers the base of the bill, as in the hawk kind.

CERECLOTH, *s.* Cloth smeared over with glutinous matter.

CERTIFICATE FOR KILLING GAME, *s.* The legal authority prescribed by act of parliament.

Penalty for shooting without, 20*l.*

To be taken out annually, in the parish or place where your assessed taxes are paid—costs, 3*l.* 13*s.* 6*d.*. and one shilling fee to the collector.

Does not authorise unqualified persons to kill game, but exempts them from the penalty of 20*l.*, and leaves them subject to that of 5*l.* for non-qualification, and also to that of 5*l.* a piece for every head of game found in their possession.

For menial servants, hired as gamekeepers, costs, 1*l.* 5*s.*, and a shilling fee to the collector.

Persons, not menial servants, must have a three and a half guinea certificate, and should have, also, the common gamekeeper's certificate, to hold a deputation.

When demanded by any assessor, collector, land owner, commissioner, inspector, surveyor, occupier of land, also gamekeeper, or other person, provided the two latter produce their certificates, previously to requiring yours, penalty for refusing, 20*l.* If you have not your certificate to produce, your name, and place of abode, may be asked. All certificates expire on the 5th of April in each year.

If you have not a certificate to produce at the time it is called for, your Christian and surnames, and place of abode, may be demanded by any assessor, &c. &c., (as before mentioned) and the penalty for refusing them, or giving a false name, is 20*l.*

CERULEAN, *a.* Blue, sky-coloured.

CHAD, *s.* A sort of fish.

CHAFFINCH, *s.* A bird so called, because it delights in chaff.

This bird is rather less than the sparrow. The bill is bluish; irides hazel; the forehead black; crown of the head, back part, and sides of the neck, bluish ash-colour; the cheeks, under side of the neck, and breast, dull pink; back, chestnut-brown; rump greenish; belly, white, tinged with pink; the bastard wing and coverts of the primary quills are black; those of the secondary tipped with white; the smaller coverts black and greyish, on which is a spot of white; the quill-feathers dusky, slightly edged with greenish yellow on the outer webs, marked with white on both webs at the base; tail dusky; the exterior feather is obliquely marked with white, taking in the whole of the outer web, the next is tipped with white; legs dusky.

The female is of a dull green above; the breast and belly of a brown or dirty white; the wings have the same markings as the male, but less brilliant.

This bird makes a most elegant nest of green moss, curiously studded with lichen, interwoven with wool, and lined with feathers and hair. It builds against the side of a tree, particularly in ivy, or in some forked branch of a bush; but particularly in apple trees overgrown with moss and lichen, and, like many other birds, adapts the materials of its nest to the surrounding colour; an instinct of no small importance.—*Bewick.*

CHAIN, *s.* A series of links fastened one within another; a bond, a manacle; a fetter.

CHAISE, *s.* A carriage either of pleasure or expedition.

CHALDRON, or CHAUDRON, *s.* A dry English measure of coals, consisting of thirty-six bushels heaped up. The chaldron should weigh two thousand pounds.

CHALK, *s.* A white fossil, usually reckoned a stone, but by some ranked among the boles.

CHALYBEATE, *a.* Impregnated with iron or steel.

CHAMBEL OF A HORSE, *s.* The joint or bending of the upper part of the hind leg.

CHAMOIS, *s.* An animal of the goat kind, the skin of which made into leather is called *Shammy.*

The chamois is a little larger than a goat, but much superior in power and agility; the strongest man could not hold one of a month old; they bound from precipice to precipice to a prodigious distance, gaining the loftiest summits, and precipitating themselves from the steepest rocks without fear. The chase of this animal occupies a great part of the mountainous population, and many perish annually in the hazardous pursuit.

Often the hunter, overtaken by a dark mist, loses himself amongst the ice, and dies of cold and hunger; or the rain renders the rocks so slippery, that he is not able to reascend them. In the midst of eternal snows, braving all dangers, they follow the chamois frequently by the marks of their feet; when one is perceived at a distance, the hunter creeps along till within reach of his gun, which he rests on a rock, and is almost always sure of his prey: thus the innocent beast, which tranquilly feeds, perhaps enjoys the last moments of its happy existence. But if his watchful eye perceives the enemy, as is often the case, he flies from rock to rock, "timor addidit alas," and the fatigues of the pursuer begin, who traverses the snows, and climbs the precipices, heedless of how he is to return. Night arrives, yet the hopes of the morrow reassure him, and he passes it under a rock. There, without fire, without light, he draws from his wallet a little cheese and oaten bread, which he is obliged to break with a stone, or with the hatchet he carries to cut his path in the ice. This repast finished, he falls asleep on his bed of snow, considering what route the chamois has probably taken. At break of day he awakens, insensible to the charms of a beautiful morning, to the glittering rays which silver the snowy summits of the mountains around him, and, thinking only of his prey, seeks fresh dangers. Thus they frequently remain many days in these horriblo deserts, while their wives and families scarcely dare to sleep, lest they should behold the spirits of their dead husbands; for it is believed that a chasseur, after his death, always appears to the person who is most dear to him, to make known where lie his mangled remains, to beg the rites of burial.

CHAMP, *v.* To bite with a frequent action of the teeth ; to devour.

CHANCE, *s.* Fortune, the cause of fortuitous events ; the act of fortune ; accident ; possibility of any occurrence.

CHAP, *s.* The upper or under part of a beast's mouth.

CHAR, *s.* A fish found chiefly in Winandermeer in Lancashire.

The char is a most beautiful and excellent fish, and is a fish of prey. They generally haunt deep cool lakes, and are seldom found at the surface till late in autumn. When they are at the surface, however, they will take either fly or minnow. I have known some caught in both these ways, and have myself taken a char, even in summer, in one of those beautiful, small, deep lakes in the Upper Tyrol, near Nazereet; but it was where a cool stream entered from the mountains, and the fish did not rise, but swallowed the artificial fly under water. The char is always, in its colour, a very brilliant fish, but in different countries there are many varieties in the tint. I do not remember ever to have seen more beautiful fish than those of Aussee, which, when in perfect season, have the lower fins and the belly of the brightest vermilion, with a white line on the outside of the pectoral, ventral, anal, and lower part of the caudal fin, and with vermilion spots, surrounded by the bright olive shade of the sides and back. The dorsal fin in the char has eleven spines, the pectoral fourteen, the ventral nine, the anal ten, and the caudal twenty. I have fished for them in many lakes, without success, both in England and Scotland, and also amongst the Alps ; and I am told the only sure way of taking them is by sinking a line with a bullet and a hook having a live minnow attached to it, in the deep water which they usually haunt.—*Davy.*

CHAR, *v.* To burn wood to a black cinder.

CHARADRIUS (LINN.) *s.* Plover, a genus thus characterised :

Bill shorter than the head, slender, straight, compressed, nasal furrow prolonged more than two-thirds ; mandibles bulged towards the tip. Nostrils at the base, jagged, slit lengthwise in the middle of a large membrane, which covers the fosse. Legs long or of middle length, slender, three toes directed forwards ; the outer toe joined to the middle one by a short membrane ; the inner toe separate. Tail slightly rounded or square. Wings of middle size, the first quill a little shorter than the second, which is the longest in the wing.—*Montagu.*

CHARCOAL, *s.* Coal made by burning wood. *Charcoal poultices* are sometimes used to remove the fetid smell arising from greased heels.

CHARGE, *v.* To accuse; to command; to fall upon, to attack; to load a gun.

CHARGE, *s.* Care, trust, custody; command, commission; imputation; expense; onset; the quantity of powder and ball put into a gun; a preparation, or a sort of ointment applied to the shoulder-splaits and sprains of horses.

Charges are plasters applied to the legs to remove windgalls and lameness, previous to turning the horse out. Those in common use, are—

1. Yellow rosin	2 oz.
Burgundy pitch	4 oz.
Barbadoes tar	2 oz.
Bees-wax	3 oz.
Red lead	4 oz.
2. Yellow rosin	1 lb.
Bees-wax	8 oz.
Common turpentine	2 oz.
Armenian bole, powdered	4 oz.—Mix.

The first three are to be melted together, and then the latter is to be added. The mixture is to be constantly stirred until sufficiently cold to be applied; and if it prove too thick when cold, it may be softened with a little oil or lard.

CHARGER, *s.* an officer's horse.

CHARIOT, *s.* A carriage of pleasure, or state.

CHARMER, *s.* One that has the power of charms, or enchantments.

The Charmer.—That individuals have exercised a powerful and unaccountable influence on the most unmanageable animals, by means which still remain a mystery, is certain. The most remarkable case on record, is that of an Irish blacksmith, who, by an undiscovered agency, could subdue the most vicious horses. He asserted, that this was effected by merely whispering in the animal's ear some potent spell, and hence he gained the title of *the charmer*. This power over the most desperate horses was so often put to the test, that all doubt is idle. He never refused to enter the stable of horses that to all besides were unapproachable, and after a short tête-à-tête, the animal would be found trembling and subdued, and while every limb appeared convulsed with terror *the charmer* would pass under his belly, lift his feet, or do any thing he was required. In his repeated experiments upon the most savage horses, *the charmer* never received any injury, or failed in subduing the animal.

Many attempts have been made to account for the means by which this influence was obtained. The general belief was, that some powerful drug was passed by the exorciser into the horse's ear; but by what means was he enabled to approach sufficiently close to a furious brute to administer it?

It is singular that though *the charmer* was a miserable and poverty-stricken wretch, no bribe could induce him to communicate the charm—if it was one—and though immense sums of money were offered, he carried the secret with him to the grave!

CHASE, *v.* To hunt, to pursue; to drive.

CHASE, *s.* Hunting, pursuit of anything as game; fitness to be hunted; pursuit of something as desirable; hunting match; the game hunted; open ground stored with such beasts as are hunted; the chase of a gun, is the whole bore or length of a piece.

CHASER, *s.* Hunter, pursuer, driver.

CHECK, *s.* Restraint, curb; in falconry, when a hawk forsakes the proper game to follow other birds; the cause of restraint; a stop.

When hounds divide and are in two parts, the whipper-in must wait for the huntsman's halloo before he stops either. If there are many scents, and it is quite uncertain which is the hunted fox, he should stop those hounds that are the farthest down the wind, as they can hear the others, and will reach them soonest.

When hounds are at a check, every one should be silent, and stand still, the huntsman had better let the hounds alone, or content himself with holding them forward, without taking them off their noses.

If hounds come to a check on a high road, by the fox being headed, in trying back they have the best chance of hitting off the scent again, as they may try on both sides at once.—*Beckford.—Daniel.*

CHECKMATE, *s.* The movement on the chess-board, that puts an end to the game.

CHEEK, *s.* The side of the face below the eye; a general name among mechanics for almost all those pieces of their machines that are double.

CHERUP, *v.* To chirp, to use a cheerful voice.

CHESS, *s.* A nice and intricate game, in imitation of a battle between two armies.

RULES FOR CHESS.

1. Move your pawns before your pieces, and afterwards bring out the pieces to support them; therefore the king's, queen's and bishops' pawns should be the first played, in order to open the game well.

2. Do not, therefore, play out any of your pieces early in the game, because you thereby lose moves, in case your adversary can, by playing a pawn, make them retire, and he also opens his game at the same time: especially avoid playing your queen out, till your game is tolerably well opened.

3. Avoid giving useless checks, and never give any unless to gain some advantage, because you may lose the move, if the adversary can either take or drive your piece away.

4. Never crowd your game by having too many pieces together, so as to prevent your men advancing or retreating as occasion may require.

5. If your game should be crowded, endeavour to free it by exchanges of pieces or pawns, and castle your king as soon as convenient; afterwards bring out your pieces, and attack the adversary where weakest.

6. When the adversary plays out his pieces before his pawns, attack them as soon as you can with your pawns, by which you may crowd his game and make him lose moves.

7. Never attack the adversary's king without a sufficient force; and if he attack yours, and you cannot retaliate, offer exchanges; and should he retire, when you present a piece to exchange, he may lose a move. It also may sometimes be expedient to act in this manner in case of other attacks.

8. Play your men in guard of one another, so that if any be taken, the enemy may also be captured by that which guarded yours, and endeavour to have as many guards to your piece, as your adversary advances others upon it; and, if possible, let them be of less value than those he assails with. When you cannot well support your piece, see if by attacking one of his that is better, or as good, you may not thereby save yours.

9. Never attack but when well prepared, for thereby you open your adversary's game, and prepare him to pour in a strong attack upon you, as soon as your weaker one is over.

10. Never play till you have examined whether you are free from danger by your adversary's last move; nor offer to attack till you have considered what harm he would be able to do you by his next moves, in consequence of yours.

11. When your attack is in a prosperous way, never be diverted from it by taking any piece, or other seeming advantage, your adversary may purposely throw in your way, with the intent that, by your taking the bait, he might gain a move which would make your design miscarry.

12. When, in pursuing a well-laid attack, you find it necessary to force your adversary's defence, with the loss of some pieces; if, upon counting as many moves forward as you can, you find a prospect of success, sacrifice a piece or two to gain your end: these bold attempts make the finest games.

13. Never let your queen stand so before the king, as that your adversary, by bringing forwards a rook or a bishop, might check your king if she were not there, for you could hardly save her, or perhaps at best must sacrifice her for an inferior piece; as for example: place the white king on 61, the queen on 53; the black king on 4, and the rook, on 16: which last, if moved to 13, must be taken by the white queen, who in return would be taken by the black king, because the white queen could not otherwise be moved without putting the king on check to the black rook.

14. Let not your adversary's knight fork your king and queen, or king and rook, or queen and rook, or your two rooks, at the same time; for in the two first cases, the king being forced to go out of check, the queen or the rook must be lost; and in the two last a rook must be lost, at best, for a worse piece. Place the white queen on 5, the rook on 7, and a black knight on 37. The latter piece, if moved to 22, will fork both the queen and rook, and consequently one of them must be lost for the knight.

15. Take care that no guarded pawn of your adversary's fork two of your pieces: knights and rooks are particularly liable to this mode of attack; also guard against either a check by discovery, or a stale-mate.

16. When the kings have castled on different sides of the board, attack with the pawn you have on that side where the adversary has castled, advancing the pieces, especially the

queen and rooks to support them; and if the adversary's king have three pawns on a line in front, he should not stir them till forced to it.

17. Endeavour to have a move in ambuscade; that is, place the queen, bishop, or rook behind a pawn, or a piece, in such a manner, as that, upon playing that pawn, or piece, you discover a check upon your adversary's king, and consequently may often get a piece, or some other advantage by it. Suppose the black king on 6, a white bishop on 41, and a pawn on 34; by moving the pawn to 26, a check by the white bishop is discovered upon the black king.

18. Never guard an inferior piece or pawn with a better, if you can do it with a pawn, because that better piece may in such a case be, as it were, out of play.

19. A pawn pushed on, and well supported, often costs the adversary a piece; but one separated from the others is seldom of any valne. And whenever you have gained a pawn, or other advantage, and are not in danger of losing the move thereby, make as frequent exchanges as you can.

20. If each player have three pawns upon the board, and no piece, and you have a pawn on one side of the board, and the other two on the other side, and your adversary's 3 are opposite to your 2, march with your king to take his pawns; and if he move to support them, go on to queen with your single pawn; and if he attempt to hinder it, take his pawns, and push yours to queen; that is, to move a pawn into the adversary's back row, in order to make a queen, when the original is lost.

21. At the latter end of the game, each party having only three or four pawns on different sides of the board, the kings are to endeavour to gain the move, in order to win the game: for example—the white king placed on 54, and the black king on 37, white would gain the move by playing to 53, or black to 38, and in both cases the adverse king would be prevented from advancing.

22. When the adversary has no more than his king and one pawn on the board, and you a king only, you can never lose that game if you bring and keep your king opposite to your adversary's, when he is immediately either before or on one side of his pawn, and only one house between the kings. This must then either be a drawn game, or if the opponent persist in his endeavours to win, he will lose by a stale-mate, by drawing you upon the last square.

23. When your adversary has one pawn on the rook's line, with a king and bishop against a king only, and his bishop is not of the colour that commands the corner-house his pawn is going to, if you can get your king into that corner, you cannot lose that game, but may win by a stale-mate.

24. When you have only your queen left in play, and your king happens to be in that position of stale-mate, keep giving check to your adversary's king, always taking care not to check him where he can interpose any of his pieces that make the stale: by so doing, you will at last force him to take your queen, and then you win the game by being in stale-mate.

25. Never cover a check with a piece that a pawn pushed upon it may take, for fear of only getting that pawn for it: put a black rook on 7, and a pawn on 40; the white king on 63, and a knight on 61: the white king being on a check to the rook, if the check be covered by moving the white knight to 56, the black pawn could then be moved to 48, and take the knight.

26. Do not crowd your adversary's king with your pieces, lest you inadvertently give a stale-mate.

27. Do not be too much afraid of losing a rook for an inferior piece; though a rook is better than any other, except the queen, yet it seldom comes into play, so as to operate, until the end of the game; and it is generally better to have a worse piece in play than a superior out.

28. When you have moved a piece, which your adversary drives away with a pawn, that is a bad move, your enemy gaining a double advantage. At this nice game no move can be indifferent. Though the first move may not be much, between equally good players, yet the loss of one or two more, after the first, makes the game almost irretrievable: but if you can recover the move, or the attack (for they both go together), you are in a fair way of winning.

29. If ever your game be such, that you have scarce any thing to play, you have either brought out your pieces wrong, or, which is worse, not at all; for if you have brought them out right, you must have variety enough.

30. Do not be much afraid of doubling a pawn: two in a direct line are not disadvantageous when surrounded by three or four others; three together are strong, (as three white pawns on 28, 35 and 37;) but four, (as 44 in addition) that make a square, with the help of other pieces, well managed, form an invincible strength, and probably may produce you a queen: on the contrary, two pawns, with an interval between (as on 35 and 37) are no better than one; and if you should have three over each other in a line (as 26, 34, and 42) your game cannot be in a worse situation.

31. When a piece is so attacked that it is difficult to save it, give it up, and endeavour to annoy your enemy in another place; for it often happens, that whilst your adversary is pursuing a piece, you either get a pawn or

two, or such a situation as ends in his destruction.

32. Supposing your queen and another piece are attacked at the same time, and by removing your queen, you must lose the piece, if you can get two pieces in exchange for her, rather do that than retire; for the difference is more than the worth of a queen; besides, you preserve your situation, which is often better than a piece; when the attack and defence are thoroughly formed, if he who plays first be obliged to retire by the person who defends, that generally ends in the loss of the game on the side of him who attacks.

33. Do not aim at exchanges without reason; a good player will take advantage of it, to spoil your situation, and mend his own: but when you are strongest, especially by a piece, and have not an immediate check-mate in view, then every time you exchange, your advantage increases. Again, when you have played a piece, and your adversary opposes one to you, exchange directly, for he wants to remove you: prevent him, and do not lose the move.

34. Every now and then examine your game, and then take your measures accordingly.

35. At the latter end of the game, especially when both queens are off the board, the kings are capital pieces; do not let your king be idle; it is by his means, generally, you must get the move and the victory.

36. As the queen, rooks, and bishops operate at a distance, it is not always necessary in your attack to have them near your adversary's king; they do better at a distance, cannot be driven away, and prevent a stalemate.

37. When there is a piece you can take, and that cannot escape, do not hurry; see where you can make a good move elsewhere, and take the piece at leisure.

38. It is not always right to take your adversary's pawn with your king, for very often it happens to be a safeguard and protection to him. Place a black rook on 5, with a pawn on 45, and the white king on 53, and he will be sheltered by the black pawn from the attack of the rook.

39. When you can take a man with different pieces, consider thoroughly with which you had best take it.

APPLICATION TO SOME OF THE FOREGOING RULES.

1. Whether you play the open or close game, bring out all your pieces into play before you begin the attack; for if you do not and your adversary should, you will always attack, or be attacked, at a great disadvantage; this is so essential, that you had better forego an advantage than deviate from it; and no person can ever play well who does not strictly practise this. In order to bring out your pieces properly, push on your pawns first, and support them with your pieces, by which your game will not be crowded, and all your pieces will be at liberty to play and assist each other, and so co-operate towards obtaining your end; and either in your attack or defence, bring them out so as not to be driven back again.

2. When you have brought out all your pieces, which you will have done well, if you have your choice on which side to castle; then consider thoroughly your own and adversary's game, and not only resolve where to castle, but likewise to attack where you appear strongest, and your enemy weakest. By this it is probable you will be able to break through your adversary's game, in which some pieces must be exchanged. Now pause again, and survey both games attentively, and do not let your impetuosity hurry you on too far; at this critical juncture (especially if you still find your adversary very strong) rally your men, and put them in good order for a second or third attack, still keeping them close and connected, so as to be of use to each other. For want of this method, and a little coolness, an almost sure victory is often snatched out of a player's hands, and a total overthrow ensues.

3. At the last period of the game, observe where your pawns are strongest, best connected, and nearest to queen; likewise mind how your adversary's pawns are disposed, and compare these things together; and if you can get to queen before him, proceed without hesitation; if not, hurry on with your king to prevent him: I speak now, as supposing all the noblemen are gone; if not, they are to attend your pawns, and likewise to prevent your adversary from going to queen.—*Vide Hoyle—Jones, &c.*

CHESS-BOARD, *s.* The board or table on which the game of chess is played.

CHESS-MAN, *s.* A puppet for chess.

CHEVAUX-DE-FRISE, *s.* A piece of timber traversed with wooden spikes, pointed with iron, five or six feet long.

CHEW, *v.* To grind with the teeth, to masticate; to meditate, or ruminate in the thoughts; to taste without swallowing.

Chick, Chicken, *s.* The young of a bird, particularly of a hen, or small bird.

Chine, *s.* The part of the back in which the back-bone is found; a piece of the back of an animal.

Chirp, *s.* The voice of birds or insects.

Chop, *v.* To do any thing with a quick motion; to light or happen upon any thing. To fall upon a scent.

Chough, *s.* A bird which frequents the rocks by the sea.

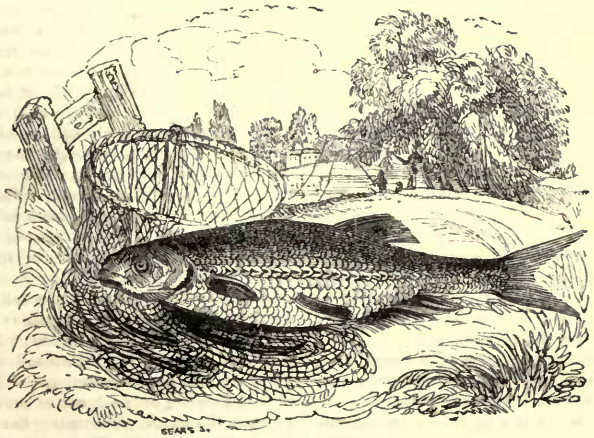
This species weighs about fourteen ounces; length near seventeen inches. The bill is longer and more slender than in any of the genus, a little curved, of a deep orange red, much resembling red coral, and is remarkably brittle; irides hazel.

The plumage is wholly black, glossed with purple; legs and feet red; claws black, strong, and much hooked. The female differs in not being so large, and in the bill being shorter; the plumage in both sexes is alike.

This bird with us seems to be chiefly confined to Devonshire, Cornwall, and Wales, where it is found on most of the bold rocky shores. It has been seen on the cliffs of Dover, supposed to have escaped from confinement, and stocked those rocks. But we believe the breed in those parts is again lost.—*Montagu.*

Chronic, *a.* Relating to time. A chronic distemper is of long duration. *Vide* Lameness.

Chub, *s.* A river fish. The cheven.



This fish takes its name from the head, not only in our own but other languages; we call it chub, according to Skinner, and from the old English cop, a head; the French, testard; the Italians, capitome: in different parts of England this fish is called cheven, nob, or botling; he much resembles the carp, but is of a longer form; the body is oblong, rather round, and of a pretty equal thickness in the greater part of the slope; the scales are large; the irides silvery; the cheeks of the same colour; the head and back of a deep dusky green; the sides silvery, but in the summer, yellow; the belly white; the pectoral fins of a pale yellow; the ventral and anal fins, red; the tail forked, of a brownish hue, but tinged with blue at the end; it is altogether a handsome fish, will sometimes weigh upwards of five pounds; but Salvianus speaks of them as increasing to eight or nine. The flesh of the chub is not in much esteem, being coarse, and when out of season, full of small hairy bones; the head and throat are the best parts, taking care to have the latter well washed and cleansed from the grass and weeds usually in it. The roe is exceedingly good, and this fish stewed as carp, will, it is said, deceive a connoisseur.

The haunts of the chub are in rivers whose bottoms are of sand or clay, or which are bounded by clayey banks; particularly in deep holes, shaded by trees, weeds, &c. They frequently float on the surface, and are sometimes in streams and deep waters where the currents are strong; in ponds fed by a rivulet they grow to a large size. They spawn in April, and are most in perfection in December and January, having then very few of the hairy bones aforementioned.

The chub does not afford the angler so much diversion as the trout, from being so dull a fish on the hook, and when once struck becoming soon tired; but he bites so eagerly, that, when he takes the bait, his jaws are heard to chop like those of the dog, and having a very wide leather mouth, and his teeth in his throat, there is little danger of his breaking hold; to fish for him, the angler should have a stout long rod, a strong line (if he uses a reel he will be enabled the better to fish under bushes) with a yard or more of the best silk-worm-gut at bottom, a hook proportioned to the bait used, a swan-quill float, and the line so shotted, eight or ten inches from the hook, as to sink the float to a quarter of an inch above the surface; the same ground-bait to be used as for the carp, and the hook baited with a sufficient quantity of salmon's roe (boiled a little) to fill up the bend properly; this rightly done is a tempting bait. The large ones are to be caught by dibbing, very early in the morning, with the brown beetle or cock-chafer: by day-break the angler should be at the river, and after baiting his hook, let him move it two or three times near the surface, as in the act of flying; then let it softly drop on the water, shaking the rod gently, which will cause the appearance of its struggling to escape: this attracts the chub, who are so fond of this bait that they will rise two or three at a time to seize it; the landing-net in this fishing should never be forgotten, as the places most likely for success in taking chub, are those where the angler cannot get to the water-side to land them with his hands.

Another way of dibbing is in a hot summer day with a grasshopper. In any hole where they haunt, many of them will be seen basking themselves near the surface; the rod must be both long and of considerable strength; the line strong, and in length about a yard. Bait the hook with a grasshopper, and the angler must conceal himself behind some bush or tree, and remain as motionless as possible, for the chub is so fearful, that the smallest shadow of a bird flying over, or of the rod, makes him sink to the bottom, but he will soon rise again. Having selected the largest chub, let him move the rod with great slowness and caution, and drop the bait gently upon the water, three or four inches before it, and he will infallibly take it: there is no danger of securing the chub, if allowed play enough before it is attempted to be taken out, being one of the leather-mouthed fishes, wherein a hook seldom loses its hold.

The chub will take gentles, wasps, maggots (which must be baked in an oven before used). Paste of fine new white bread (without being made wet), worked up in the hand, and tinged with vermilion as near as possible to the colour of salmon's roe; from the hook this paste will not easily wash off, and is a most killing bait; but the best baits for bottom or float-fishing for this fish, are old Cheshire cheese, (such as, without crumbling, will mould in the hand), and the pith from the back bone of an ox, with the outward so carefully taken off as not to bruise the inward skin.

At every season of the year, the former of these is good; but the latter end of summer, and all the winter, are the preferable times for both. In baiting with the cheese, put a round lump, the size of a cherry, on a large hook, so as to cover the bend, and some way up the shank; fish six inches from the bottom, or in cold raw weather the bait may lie on the ground; but if the hole has not been ground-baited, the depth is immaterial; when there is a bite, the float will very swiftly be drawn under water, strike immediately and give him play, holding a tolerable tight line, to keep the fish clear of weeds and stumps, which at sight of the angler he will endeavour to get at for shelter, and if not properly managed, he will break the tackle. In the spring of the year the chub will take a marsh, or small red-worm; in May, June, and July, flies, beetles, snails (the black ones with the belly slit to shew the white;) in August, pastes: the large chub will also take minnows, small dace, and gudgeons, angled with in the same manner as for perch; and the latter bait used likewise in trolling for pike, the hook not so heavily loaded upon the shank. They gorge immediately upon taking the bait. Their biting times are chiefly from before sunrise until nine in the morning, and from four until after sunset in the summer, (some will, by chance, take at any time of the day when mild and cloudy); and in the winter the middle of the day is best; remembering that in hot weather, they are to be fished for at or near the top, and not deeper than mid-water, and in cold, close to or upon the bottom; and that the main point in taking this fish is, the angler's keeping himself out of sight.—*Daniel.*

Chubbed, *a.* Big-headed, like a chub.

Chuck, *v.* To make a noise like a hen.

Chyle, *s.* The white juice formed in the stomach by digestion of the aliment.

Cicatrice, or Cicatrix, *s.* The scar remaining after a wound; a mark, an impressure.

Cicatrize, *v.* To apply such medicines to wounds, or ulcers, as skin them.

Cider, *s.* The juice of apples expressed and fermented.

Ciliary, *a.* Belonging to the eyelids.

Ciliated (*Lingua Ciliata*, Linn.), *a.* In ornithology, a term used when the tongue is edged with fine bristles, as in ducks.

Cingle, *s.* A girth for a horse.

Cinnabar, *s.* Vermilion, a mineral consisting of mercury and sulphur.

Cinnamon, *s.* The fragrant bark of a low tree in the island of Ceylon.

To dye cinnamon colour.—Take about three pints of *right stone crottle*, (common lichen) about four or six chips of young fustic, and a good flake of walnut-bark; put them down in eight quarts of water; when your time of boiling is half done, add a pint of crottle and eight or ten fustic chips; make four very thick canvass bags, ten inches broad and fourteen or fifteen inches long—wash them when made, lest they should hurt your colour, Divide one pound of fur into four parts. and put a part into each bag; tie a leaden weight to each bag, at both ends, allowing two inches of string, to admit the bags to rise that height from the bottom, lest they should burn; place them in the pot so that they may not entangle with each other, put in your frame without the lid, and fill the pot with water. It will take from twelve to eighteen hours boiling; divide that time as to the drawing each shade; look at them every hour by lifting out a bag, and if you see a shade to your eye, draw a part and put down your bag again: in this case you should put half a pound of fur in your bags. There are many shades of cinnamon wanting in fishing. Thus you have your colour nice and clean. The reason of using the bags is the difficulty of carding the crottle out of the fur; and the reason of boiling so long, is, that the bag in some degree prevents the dye.

You may get a more flaming cinnamon by using the following dye-stuff:—A quarter of a pound of turmeric, half a table-spoonful of brasil, and a flake of walnut-bark; follow the process of the other, as to the addition of more dye-stuff, the bags, leads, &c.—*Old Receipt.*

Cinque, *s.* A five.

Circle, *v.* To move round any thing; to enclose, to surround; to confine.

Circumvolation, *s.* The act of flying round.

Cirrus, *s.* A description of cloud.

Cirrus or *Curlcloud.*—When, after much fine weather, this cloud appears like a white line pencilled along on the azure sky, we may generally reckon on a change; and if the cloud increases, and others are added to it latterly, or if it change to the wane-cloud, rain will probably follow before long.

The tufts of cirrus, called mares' tails, are known to be a sign of wind, which has frequently been found to blow from the quarter to which these curlclouds have previously pointed.—*Foster.*

Cist, *s.* A case, a tegument, commonly the enclosure of a tumour.

Cistern, *s.* A receptacle of water for domestic uses; a reservoir; an enclosed fountain; any watery receptacle.

Citron, *s.* A large kind of lemon.

Citron-Water, *s.* Aqua vitæ, distilled with the rind of citrons.

CLARET, *s.* A species of French wine.

To dye claret colour.—Take any quantity of stuff, put it down with some young fustic chips, bring it up to as bright a shade as it will give, and then put in some black grain; bring it up high with this, add some brasil dust, and you will have a *deep red.* Have a small quantity of boiling water and a little stale urine in another vessel, dip a small bit of wool in, and if you like the change dip more; have some archil liquor boiled and strained, add this to the rest of your liquor sparingly, as, if you darken too much at first, you ruin all: thus you may draw two shades between the different additions of the archil and liquor; and if you wish it to be still darker, take out your fur, and throw into the pot a quarter of a tea-spoonful of salt of tartar, and that will darken it sufficiently.

To dye good dark clarets, blood, and fiery reds.—Get some bunches of the clearest red hackles, ground them well in cochineal, then add some brasil dust, and when they have boiled a few minutes draw a bunch or two; add more brasil dust, boil and draw again. If they are changed enough, then add in some archil and boil them again. Never attempt to ground in yellow for this process, as at best the hackles will appear but a dull mahogany colour when placed between you and the light. Never use young fustic in hackle-dyeing, as it spoils the feathers.—*Old Receipt.*

CLASS, *s.* A rank or order of persons or animals.

CLASS, *v.* To range according to some stated method of distribution.

CLAW, *s.* The foot of a beast or bird armed with sharp nails.

Puppies are frequently born with *dew* claws; sometimes they are double. Whether there is any bony attachment or not, it is always prudent to cut them off in a few days after birth, otherwise they become very troublesome as the dog grows up; for the claw or nail attached to the end of each, frequently turns in and wounds the flesh; or, by its hook-like shape, it catches into every thing the dog treads on.

The *horny claws* or *nails* of the true toes are also subject, when dogs have not sufficient exercise, to become preternaturally long, and, by turning in, to wound these toes likewise, and lame the dog. It is better to saw them off with a very fine and hard cockspur saw, and then to file them smooth; avoiding to cut them too close, or the vascular part may be entered on, and much unnecessary pain given to the animal. Some dogs require their nails to be cut every two or three months, or even oftener; otherwise they become very lame.—*Blaine.*

CLEANLINESS, *s.* Freedom from dirt, being clean.

The following curious fact is mentioned in a communication on the cleanliness of animals.—(*Jour. Roy. Institution*, No. II.) "Walking one day along the shore of Holy Island, off the coast of Northumberland, I disturbed an ash-coloured sanderling (*Calidris islandica*, STEPH.), which flew heedlessly, and as if injured. On shooting the bird, I found that it was covered with vermin, more especially about the head; so much so, that the poor thing must have fallen a victim to their tormenting ravages. On further examination, I found that it had lost one of its legs, so that it was from its incapability to rid itself of these insects that their extraordinary increase was to be attributed. Poultry (the same naturalist remarks) which run about in stony or paved yards, wear away the points of their claws by friction and digging, which renders them unfit to penetrate their coating of feathers; they are, therefore, more covered with vermin, and, in consequence, more sickly than fowls from the country."—*Ainsworth.*

CLERGY, *s.* A man in holy orders, not a laic.

The propensity of the clergy to follow the secular pastimes, and especially those of hunting and hawking, is frequently reprobated by the poets and moralists of the former times. Chaucer, in his Canterbury Tales, makes the monk much better skilled in riding and hunting, than in divinity. The same poet, afterwards, in the Ploughman's Tale, takes occasion to accuse the monks of pride, because they rode on coursers like knights, having their hawks and hounds with them. In the same tale he severely reproaches the priests for their dissolute manners, saying, that many of them thought more upon hunting with their dogs, and blowing the horn, than of the service they owed to God.

The bishops and abbots of the middle ages hunted with great state, having a large train of retainers and servants; and some of them are recorded for their skill in this fashionable

pursuit. Walter, bishop of Rochester, who lived in the thirteenth century, was an excellent hunter, and so fond of the sport, that at the age of fourscore he made hunting his sole employment, to the total neglect of the duties of his office. In the succeeding century an abbot of Leicester surpassed all the sportsmen of the time in the art of hare-hunting; and even when these dignitaries were travelling from place to place, upon affairs of business, they usually had both hounds and hawks in their train. Fitzstephen assures us, that Thomas à Becket, being sent as ambassador from Henry II. to the court of France, assumed the state of a secular potentate; and took with him dogs and hawks of various sorts, such as were used by kings and princes.

At the time of the Reformation, the see of Norwich, only, was in the possession of no less than thirteen parks, well stocked with deer and other animals for the chase. At the end of a book of Homilies in MS., in the Cotton Library, written about the reign of Henry VI., is a poem containing instructions to priests in general, and requiring them, among other things, not to engage in "hawkynge, huntynge, and dawnsynge."—*Strutt.*

Clew, *s.* Thread wound upon a button; a guide.

Click, *v.* To make a sharp, successive noise.

Cliff, or Clift, *s.* A steep rock, a rock.

Clip, *v.* To cut with shears; to curtail, to cut short.

Clipping, *s.* The part cut or clipped off; an operation performed on rough or long-coated horses. Of its benefits and disadvantages very contrary opinions have been given.

I should certainly prefer seeing a horse of mine with a fine short coat without the aid of clipping; but if that were not to be accomplished, I would certainly have him clipped.

* * *

"A very dangerous effect of debility, or being out of condition," says Mr. Smith, p. 18, "is, that the subject has a long rough coat, which retains the perspiration excited by exercise; and even in cold weather, when the exercise is not such as to excite sweat, the insensible perspiration which is constantly issuing from the extremities of the cutaneous vessels is condensed among the hair, and appears on the surface like dew; whereby cold is produced on the surface of the body, occasioning too great a determination of blood to the lungs, and other important viscus, which is always in proportion to the diminution of the cutaneous perspiration."

* * *

"I must own myself a very decided advocate for the clipping of hunters, having observed such horses to have had a most decided advantage, during the last season, with the Cheshire, Sir Richard Puleston's and Sir Thomas Stanley's fox-hounds, as well as with the Chester harriers, now under the very superior management of Captain Puleston. Experience and observation are, in this matter, worth a bushel of *à priori* reasoning; but scientific argument and rational explanation are not wanting to aid and enforce the practice of clipping. In the first place and to begin with the most trifling reason—the horse is a pound lighter; and the coat affording little resistance to the brush, your groom is not half so soon fatigued in dressing, and lays double strength upon the surface. This causes a greater determination to the extreme vessels, and the insensible perspiration is proportionably increased. We invariably find a connexion between the action of the skin and that of the intestines; and this is sufficiently evident in a well-groomed horse; the lacteals of the bowels seem to have a corresponding action communicated to them—they absorb and select the pabulum of the blood with increased vigour—the secreting vessels of the stomach furnish the gastric solvent more abundantly—the liver more readily acts, and separates those vitiated parts which have fulfilled their duties in the circulation, and require to be thrown out of the system, but in their transit, in the form of bile, perform other important uses, in stimulating the intestines to that regular peristaltic motion which secures a change of particles to the vessels which absorb the nourishment for the blood. But the abdominal viscera do not alone benefit by the more intimate friction which is admitted to the skin of a clipped horse. The lungs are wonderfully assisted the more the insensible perspiration is increased: the less work for them to accomplish, the less will be the determination to the internal vessels; and consequently the less risk of congestion in the minute bronchial ramifications of the lungs.

* * *

Were I to give a good price for a promising young horse for the purpose of making him a hunter, and keeping him for my own use, and a man were to come into my stable and tell me he would give me one-third of his value if I would have him clipped, I would refuse his

offer. I look upon clipping as nothing but a bad substitute for good grooming, and an operation attended with several disadvantages. In the first place, when once performed it must always be repeated; and in the second, it is a constant eye-sore to a person who is fond of seeing his horses looking well, as it effectually destroys that bloom on the skin which is not only so beautiful, but also so confirmatory of the sound health of the animal; and lastly, by depriving him of the protection which a short thick coat, lying close to the body, affords him against the scratching of thorns and briars, it very frequently causes a horse to refuse rough places in a fence which he would not have refused before. It is a remedy to be sure, or at least a palliative; but I had rather a horse of mine should endure the disease it is intended to relieve, until I could bring a better medicine to his aid; and were I to become possessed of a hunter which required clipping, I would put up with his long coat and evening sweats, until, by strengthening his general system, I god rid of the latter, to which the former is by no means a certain contributor. It is quite possible—and I have an instance at this moment in my own stable—for a horse to have a long coat (and some horses at certain periods will not wear a short coat), but still to look very blooming to the eye, *and dry immediately after a sweat*, as is the case with the horse I speak of. I am not weak enough to suppose that clipping will not continue to be practised because one individual disapproves of it; but I may be allowed to say, I will never after this year practise it again. The horse I had clipped last winter must now, I fear, be clipped again, for I abhor the sight of him in his present state—his coat somewhat resembling a poodle dog; but his evening sweats are got rid of by the method I pursued with him in the summer. Clipping may be all very well for those who cannot, or will not, get their horses into condition by other means; and to such only do I recommend it.—*Nimrod—Smith—Equestris.*

Close, *s.* A small field enclosed; the period when it is illegal to shoot or fish; the time of shutting up; a grapple in wrestling.

Clothe, *v.* To invest with garments, to cover with dress.

Clove, *s.* A valuable spice brought from Ternate; the fruit or seed of a very large tree; some of the parts into which garlick separates.

Cloven-footed, or Cloven-hoofed, *a.* Having the foot divided into two parts.

Clover, *s.* A species of trefoil.

Clout, *s.* Anciently the mark of white cloth at which archers shot; an iron plate to an axletree.

Cloy, *v.* To satiate, to sate, to surfeit.

Club, *s.* A heavy stick; the name of one of the suits of cards; the shot or dividend of a reckoning; an assembly of good fellows.

Cluster, *s.* A bunch, a number of things of the same kind growing or joined together; a number of animals gathered together.

Clutch, *s.* The gripe, grasp, seizure; the paws, the talons.

Clyster, *s.* An injection into the anus.

Clysters of broth, gravy, or gruel, will afford a very considerable quantity of nourishment: a small proportion of opium, as twenty drops of laudanum, may be given in each, to assist in retaining it within the bowels. *Astringent* clysters, as starch, rice-water, alumine whey, infusion of red roses, or of oak-bark, are useful in violent loosenesses. *Purging* clysters may be made of veal or mutton broth, with a portion of salt or moist sugar added: the effect may be still further quickened by adding castor oil or Epsom salts.

Clysters are very easily administered to dogs, and no apparatus is so convenient for the purpose as the patent syringe of Reid: a good domestic apparatus is found in the common pipe and bladder also. The liquid used should be warm, but not hot; the quantity from three ounces, to six or eight, according to the size of the dog, &c.: the pipe should be greased previously to its introduction, and the tail held down a minute or two after its removal.

* * *

In flatulent colic it is essentially useful, and it is from this circumstance being too little

known, or not attended to, that flatulent colic sometimes terminates in inflammation, and death. (*See* Carminatives.) In suppression or retention of urine, or in difficulty of staling, a clyster is the best remedy that can be employed. In short there is scarcely a disease to which horses are liable, in which clysters may not be advantageously employed, either as a principal remedy, or as an auxiliary to others. The clyster syringes commonly employed are worse than useless, because they sometimes prevent a clyster being given when it is absolutely necessary, especially in flatulent colic. The clyster-pipe and bladder is the only effectual apparatus I have seen. The pipe should be one inch in bore, and fifteen inches in length. The quantity of liquid employed should be five or six quarts, and consist only of warm water, with half a pound of salt dissolved in it. There is sometimes difficulty found in introducing the pipe, generally from hard excrement in the straight gut; sometimes, however, from the bladder being distended with urine. In such cases patience and care are necessary to exhibit the clyster effectually, and it may almost always be accomplished without raking or drawing out the hard excrement with the hand; there is no objection, however, to this operation, and when a clyster-pipe is not at hand, it must be employed as a substitute for a clyster. (*See* Raking.) The simple emollient clyster should be thin gruel, or warm water only. The anodyne or opiate clyster should be composed of three or four ounces of tincture of opium in two quarts of gruel, or warm water. Gibson gave half an ounce of solid opium dissolved in water, as a clyster to a horse in locked jaw, with success. Nourishing clysters are composed of arrow-root, or wheat-flour gruel with sugar, or broth thickened with flour. Tincture of opium is an useful addition to such clysters, especially in locked jaw.—*Blaine.*—*White.*

Coal, *s.* The common fossil fuel; the cinder of burnt wood, charcoal.

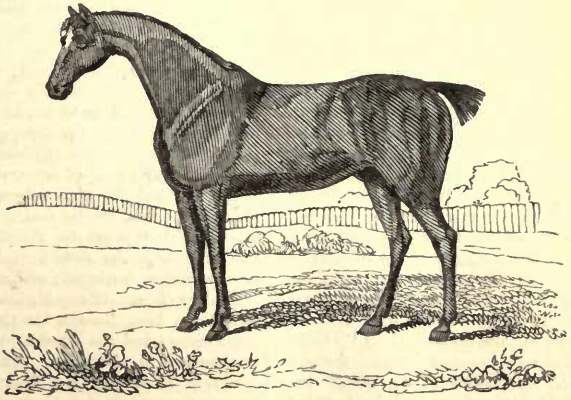
Coal-black, *a.* Black in the highest degree.

Coat, *s.* The upper garment; the covering of any animal; any tegument.

Coat, *v.* To cover; to change the hair.

Coat-card, *s.* A card having a coat on it; as the king, queen, or knave; now corrupted into *Court-card.*

Cob, *s.* A sort of sea-fowl; a low but powerful horse; a hack.



Perfection is seldom found in any living being; but certain it is, that of all animals in which perfection, or as near to it as their nature will admit, is required, it is in a horse to

carry a man or a woman on the road: and were I requested by a friend to purchase a good hack for him, I should consider him to have given me a commission ten times more difficulty than if he had requested me to purchase half a dozen hunters. The qualifications of a good hack are so numerous as to be almost disheatening to look for them: he must have good fore legs as well as good hinder ones: he must have perfect feet, a good mouth, not given to start, safe on his legs, gentle in his temper, and quiet to ride on all occasions. A fidgetty hack, however good in his nature, is very unpleasant, and in hot weather insupportable. He is fit for nothing but to ride to covert at the rate of twenty miles in the hour.—*Nimrod.*

Cobble, *v.* To mend any thing coarsely; to do or make any thing clumsily.

Cobble, *s.* A punt used for wild-fowl shooting, fishing, &c.

Cochineal, *s.* An insect, from which a red colour is extracted.

Cock, *s.* The male to the hen; the male of any small bird; the weather-cock that shows the direction of the wind; a spout to let out water or any other liquor at will; the notch of an arrow; the part of a lock of a gun that strikes with the flint; cock-boat, a small boat; a small heap of hay; the form of a hat.

Cock-fighting is a sport of great antiquity. It is supposed to have first originated with the Greeks; and that at one period it became so prevalent amongst them, that families of extensive property were reduced thereby to the lowest ebb of fortune.

As the Romans were so fond of imitating the Greeks, in their bad as well as good customs, it came to them as a mere gambling sport. According to Herodian, the first cause of contention between the two brothers, Bassianus and Geta, sons of the Emperor Septimus Severus, happened in their youth, about cock-fighting, which they had probably seen in Greece, whither they had often accompanied their father.

It is not known when this custom was first introduced into England, but undoubtedly by the Romans. The bird was here before the landing of Julius Cæsar; but no notice of cock-fighting occurs earlier than the time of William Fitz Stephen, who wrote the life of the Archbishop Becket in the reign of Henry II., and describes it as a sport of school-boys on Shrove Tuesday. From this time it continued in a fluctuating state; sometimes in vogue, at others, disapproved; and prohibited, 39 Edward III.; also in the reign of Henry VIII., and in 1569. It has been termed a royal diversion; and the cock-pit at Whitehall was erected by a crowned head for the more magnificent celebration of it. There were other pits in Drury Lane and Jewin Street. It was prohibited by Oliver Cromwell, March 31, 1664.

With respect to the breed of game fowls, the criterion of blood in these animals, before trial, is "fineness of feathers," richness of plumage, "cleanness of feet," and keenness of aspect. But there have been introduced of late years some varieties quite distinctly marked from the game fowls of old times; viz., "top knots" and "muffy heads," which were quite unknown to our ancestors.

The cock is in his prime at two years old, and retains his vigour to his fifth year: the hen somewhat longer. Cockers breed in-and-in without scruple. The following is Mr. Sketchley's description of a brood cock, in full health and vigour:—"A ruddy complexion, feathers close and short, not cold or dry: flesh firm and compact, full breasted, yet taper and thin behind; full in the girth, well coupled, lofty and spiring, with a good thigh; the beam of his leg very strong, a quick large eye, strong beak, crooked, and big at setting on." Such a one, not more than two years old, to be put to early pullets, or a blooming stag with two-year old hens; and when a cock, with pullets of his own getting. Uniformity of colours is generally sought for, and the hens selected of similar plumage to that of the cock; the same of shape, which is a greater object in the hen, than size; only she should be lofty crested, short and close feathered, with clean, sinewy, blood-like legs. Shropshire and Cheshire have long been famous for their breed of game cocks; and the Shropshire reds are in particular high estimation. There was formerly in Staffordshire a famous breed of cocks, of a perfect jet black, gipsey faced, black legs, and rather elegant than muscular; lofty in fighting, close in feather, and well shaped. This breed soon degenerated; and, I presume, is now extinct. The following procreative comparison of Mr. Sketchley speaks volumes:—

YEARS.		YEARS.		YEARS.		YEARS.
Stags 1	with hens	2	man 18		woman	22
Cock 2	with pullets	0	man 25		woman	22
Cock 2	with hens	2	man 25		woman	22
Cock 3	with hens	3	man 40 to 50		woman	45
Cock 4	with hens	3	man 50 to 60		woman	45

It is said that a game cock that happened to be on board Rodney's ship on the memorable 12th of April, during that glorious action, exhibited the most undaunted courage, by crowing and clapping his wings.—*Vide Hoyle, article* GAME COCK.

Cocks, when they crow at unwonted hours, often foretel a change of weather. We have often noticed this before rain. During the calm, still, dry, dark, and warm weather, sometimes occurring in the winter months, and which may be called the halcyon days of our climate, cocks keep a constant crowing all night and day. There appear to be three principal cock-crowings in ordinary weather, namely, about midnight or soon after, about three in the morning, and at daybreak; the latter is never omitted. We have noticed, however, that when cocks crow all day, in summer particularly, a change to rain has frequently followed.

* * *

Cocks and hammers.—If the sportsman has no objection to its clumsy appearance, I should be inclined to recommend the solid cock which falls on its end, instead of being stopped in the middle by the lock plate. It will therefore admit of main springs as strong as you please: and, by this means, add considerably to quickness in firing. But if you have very strong main springs, with the common cock, the resistance from the hammer spring, to prevent its breaking, must be so great, that you would soon wear out hammers, by being obliged to use an immoderate quantity of flints. With this another part of the lock also is safer, because the solid cock is received on a firm support annexed to the pan; while the one on the other construction suddenly catches the lock-plate, and is therefore liable to jar, and break either the tumbler itself, or the pin of the tumbler. A solid cock has many other advantages, from its durability and strength: it is proof against all awkward hands, and particularly desirable on guns which are liable to meet with rough usage in a boat.—*Sporting Repository*—*Hawker*—*Foster.*

COCK, *v.* To set erect, to hold upright; to fix the cock of a gun for a discharge; to raise hay in small heaps.

COCKER, *s.* One who follows the sport of cock-fighting; a small spaniel.

The Cocker—(*Canis extrarius. Var. B.* LINN.)—This dog is much smaller than the springing spaniel, and is generally used for woodcock and snipe shooting. His diminutive size peculiarly fits him for ranging in low and thick coverts, for which purpose nature seems peculiarly to have adapted him.

The cocker differs from the springer in having a shorter and more compact form, a rounder head, and a shorter muzzle; the ears are very long, the limbs are short and strong; the tail is generally truncated and more bushy; and the hair of the cocker, over his whole body, is more curled than that of the springer. He varies in colour from liver and white, red, red and white, black and white, all liver-coloured, and not unfrequently black, with tanned legs and muzzle.

This beautiful and lively dog seems to have been produced, originally, by a cross between the small water spaniel and the springer, for he not only resembles the figure of the latter, but also has many of his habits, combined with the lively and active disposition of both. From the beauty and temper of the cocker, the breed has become very generally diffused throughout the kingdom, and he is more frequently a companion in the parlour than used in the sports of the field. He is extremely common in many parts of Sussex, from which, in the south, he has obtained the name of the Sussex Spaniel. There has long been a beautiful breed of this dog in the possession of the Duke of Marlborough and his friends, which is preserved in great purity; these are invariably red and white, with very long ears, short noses, and black and sparkling eyes; they are active and indefatigable in the chase, and are consequently held in great estimation among sportsmen.

General Maxwell, of Edinburgh, has long had an extremely beautiful breed of cockers; most of them have been black, with tanned cheeks and legs, and ears nearly seven inches in length; they are of a small size, but they are lively and handsome little creatures.

In his general qualifications the cocker differs but little from the springer, except that he is decidedly more active: he appears also to have a more acute sense of smelling, and pursues game with an enthusiasm amounting to ecstacy. From his lively temperament, he does not tire so soon as the springer, however long the labour of the day may be.

From an innate principle of this industrious little animal, he gives the loudest proofs

of his ecstatic delight upon finding, or even coming upon the scent, foot, or haunt of game; it is also his determined resolution to persevere until he has fairly driven them from covert. Consequently all sportsmen who take the field with cockers, are compelled to be on the alert, and to keep pace with the progress which the dogs make in the wood, otherwise they are sure to lose the greater part of the game. They may even travel many a weary mile without obtaining a successful shot, as it is the unalterable nature of these dogs to spring, flush, or start all the game before them; and they pursue, without distinction, hare, pheasant, partridge, woodcock, snipe, quail, and plover. It thus becomes necessary to hunt them within gun-shot of covert, and bells or gingles should be placed inside the collars, if the wood is extensive, to prevent them from beating too wide, and to keep them within call of the whistle.

The springer and cocker are more particularly appropriated to pheasant and woodcock shooting. The former may be considered the most laborious, and the least entertaining of all field sports, if we except the mode in which it is practised in the extensive preserves of Norfolk and Suffolk, and some few districts in other counties, where the large tracts of lofty wood-lands with thick and low underwood, contribute so materially to the safety and increase of the game.

Spaniels of both descriptions are brought into general use and domestic estimation, from their handsome shape, their beautiful sleek coats, their cleanly habits, insinuating manner, incessant attendance, and faithful obedience to their masters, qualities in which they surpass all the other members of the canine race.

Cockers are said to be more subject to certain diseases than other dogs, as loss of smell, and swelling of the glands in the neck, which sometimes prevents their taking any assistance till they die; a disease of the ears, like the mange, called formicæ; and lastly to the mange itself, which is most destructive of all to their beauty, health, and quiet.—*Thornhill.*

COCKEREL, *s.* A young cock.

COCKFIGHT, *s.* A match of cocks.

COCKPIT, *s.* The area where cocks fight.

COD, or CODFISH, *s.* A sea-fish.

The fishermen take the cod from the depth of fifteen to sixty fathoms, according to the inequality of the bank, which is represented as a mountain under water, above five hundred miles long, and near three hundred broad, and that the approach to it is known by the great swell of the sea, and the thick mists that impend over it.

The largest cod ever taken on our coasts was at Scarborough, in 1755, and weighed seventy-eight pounds; the length was five feet eight inches; and the girth, round the shoulders, five feet. It was sold for one shilling. The general weight of these fish in the Yorkshire seas, is from fourteen to forty pounds.

* * *

A cod will not only live, but thrive well, in fresh water, if properly fed. A respectable fishmonger assured me that he had tried the experiment and succeeded, and offered to send me some live cod in a well-boat, for my *piscatorium* in Bushy Park.—*Daniel—Jesse.*

CODLING, *s.* An apple; a small codfish.

COFFEE, *s.* The berries of the coffee-tree; a drink made by the infusion of those berries in hot water.

COFFIN, *s.* Coffin of a horse, is the whole hoof of the foot above the coronet, including the coffin-bone.

A sprain of the coffin joint is not an unusual occurrence; and, like the former, consists of violence applied to the tendinous and ligamentous connexion of this joint. When a horse becomes suddenly lame, and attentive examination can discover no injury above, the feet should be closely examined, when it is very probable there will be found in one of them some tenderness, and perhaps swelling, particularly at the back part, towards the upper portions of the heels, and in the neighbourhood of the navicular bone, where the part will be more hot than the others, and the horse will express pain when the foot is bent or extended, and he will generally also, though not always, point the foot when in the stable, or, as it is expressed, will stand favouring. The treatment, if the heat be considerable, would be to put the whole foot into a Goulard poultice for three or four days: in

very bad cases I have thinned the whole crust of the hoof, and have drawn blood from the toe with advantage. After the heat has in some degree subsided, blister, as a milder treatment will seldom avail here: frequently it must be repeated also.—*Blaine.*

Cog, *v.* To flatter; to cog a die, to secure it, so as to direct its fall.

Cohesion, *s.* The act of sticking together; the state of union.

Coil, *v.* To gather into a narrow compass; to collect a rope.

Coin, *s.* Money stamped with a legal impression; payment of any kind.

Coistrel, *s. obs.* A coward hawk.

Colic, *s.* Is strictly a disorder of the colon; but loosely, any disorder of the stomach or bowels that is attended with pain.

The causes are various: the sudden application of cold either to the surface of the skin when hot, or to the intestines under similar circumstances, in the shape of cold water drunk hastily, and when the horse has been warm; in which latter case, the attack often soon follows. Costiveness will bring it on. Tumours in the mesentery, and strictures in the bowels are also the sources of occasional colic; and when a horse is found to be subject to repeated attacks, something of this kind, or otherwise calculous concretions, may be suspected: and I have known many instances where habitual colic was present, dependent on these causes. Horses long confined to dry food will sometime get it by suddenly gorging themselves with green meat; and with others, a constitutional tendency from some occult cause, gives them a predisposition to it.

The symptoms of spasmodic colic are usually sudden in their appearance, and not marked, as in inflammation of the bowels, by previous indisposition; but the horse is observed to be at once attacked with considerable uneasiness, shifting his position from side to side, pawing his litter, and stamping with his feet impatiently. After a few minutes thus passed, the pain remits, and leaves the horse tolerably easy; while in enteritis no perfect remission occurs, but all is one scene of nearly equable pain and distress. As the colic advances, the remissions are less perfect, and less frequent: the horse now lies down frequently, and on rising shakes himself, looking round to his sides, which occasionally, in desperate cases, he snaps at with his teeth; but more frequently he is seen to strike with his hind feet at his belly, as though determined to remove by force the cause of his pain. In enteritis this acuteness of sensation or violence of temper is seldom seen. When on the ground, it is not uncommon for the horse to roll on his back; sometimes he will remain in this situation a few seconds, or he will roll over; neither of which are usually done in simple inflammation. In colic the pulse is seldom much altered from its natural state, unless the colic have existed some time, when it occasionally presents marks of general irritation, and is not only quickened, but also somewhat hardened. If felt also during the intensity of the paroxysms, it will likewise be often found to be disturbed even in the early stage, but this is momentary only, and ceases on the remission of the pain. The extremities, as the legs and ears, in colic are not often much affected, and they never remain intensely cold for a considerable period, as in enteritis; but the coat stares, and the horse breaks out frequently into cold sweats. In colic, also, relief is obtained by friction and motion, but both aggravate the distress in enteritis. Sometimes he is seen to attempt to stale without effect, at others he stales frequently, with momentary relief.

Treatment.—Having reason to believe that the patient is labouring under simple spasm of the intestines, unmixed with inflammatory tendency, derived from idiopathic enteritis; or symptomatic irritation from inversion, involution, invagination, or intussusception of the intestinal track; proceed at once to administer such one or more of the numberless antispasmodic remedies as custom and experience have warranted the use of. Numerous as these are, there is not one that has not its advocate, and perhaps not one that does not deserve it, so simple are the means sometimes required; and so much is the constitution prone, in some cases, to assist itself or our efforts. While, at the same time, other cases occur, sufficiently obstinate, and sufficiently fatal, to require all our energies, and all our discrimination in the choice of our remedies, I can confidently speak to the antispasmodic qualities of the following, which should one or either of them be given as soon as possible, and repeated in one, two, three, or four hours, according to the violence of the symptoms, if no benefit be apparent from the first dose: for it must be remembered, that what we do we must do quickly, to prevent inflammation, for, of the fatal cases, four-fifths show evident marks of enteritic attack on a post-mortem examination.

1. Ground pepper . . . . ½ oz.
   Spirit of turpentine . . . 2 oz.
   Tincture of opium . . . 1 oz.
   Sound ale . . . . . 4 oz. Mix.

2. Spirit of vitriolic æther . . 1 oz.
Tinture of opium (laudanum) 2 oz.
Oil of peppermint . . . . 1 drachm.
Common gin, and sound ale, of each . . . . . ¼ of a pint.
3. Spirit of turpentine . . . 2 oz.
Oil of peppermint . . . . 1 drachm.
Castor oil, and watery tincture of aloes (Mat. Med.) each . . . . . 6 oz.

As a domestic remedy, and one which has relieved at the moment, when other medicines were not at hand, I would recommend the following:—

Ground pepper . . . 1 tea-spoonful.
The juice of two or three large onions . . .
Common gin, and sound ale, of each . . . ¼ of a pint.

The antispasmodic having been given, the necessity of bleeding should be next taken into consideration: if the case be one of very acute features, I would recommend that it be proceeded with without delay, and, according to the degree of intensity, or duration of the complaint, do it more or less liberally. Extensive bleeding, it should be remembered, is one of the most powerful relaxers of spasmodic constriction with which we are acquainted, and instead of its being an antagonist to the antispasmodic treatment usually adopted, by internal remedies, its relaxant qualities are found to be infinitely increased in efficacy when conjoined with large doses of opium. I have had so many opportunities of witnessing the effect of this combination, that I cannot too strongly recommend it: and although most of the ordinary cases of spasmodic colic will yield to the common stimulant treatment, and many would even go off without any treatment at all, yet bleeding, in mild cases even, is always safe and precautionary against inflammation; and in the more aggravated, it is essentially necessary, both to combat the inflammatory tendency, and to promote the relaxation of the spasmodic irritation on the muscular fibre. It is likewise particularly indicated in these violent or protracted cases, to counteract the irritative qualities of the antispasmodics used, which, though in other instances of simple spasm are innocuous, however large, yet may not prove so when reaction is at hand, or already begun. It should, however, be remembered, that though I advocate bleeding, it is not that useless and non-medical practice of bleeding by the palate or sublingual vessels; and though, with Mr. Peal, I would most strongly condemn violent, and particularly long-continued exercise, yet I have so often experienced the good effects of a brisk trot for ten minutes, that I cannot but recommend its adoption. Friction to the belly is also to be employed, by means of a brush, or if with a heated coarse woollen cloth it will be better; but the practice of rubbing with a stick is, I apprehend, worse than useless, and often hurtful. Fomentations of very hot water are also sometimes singularly efficacious; and in every case we should, by means of the patent syringe, throw up considerable quantities of relaxant clysters; and where costiveness is present, until the bowels are relieved of their fæcal matter, the clysters should be of a mild watery solution of aloes, or, by preference, of a solution of sulphate of magnesia (Epsom salts) in broth, gruel, &c. Afterwards the clysters may be made media of applying antispasmodics to the bowels, as decoction of poppy heads, or even tinct. opii, largely diluted with warm water, &c.—*Vide Outlines of Vet. Art.* * * *

Dogs are subject to two kinds of colic; one arising from constipation of the bowels; the other is of a kind peculiar to dogs, apparently partaking of the nature of rheumatism, and also of spasm. From a sudden or violent exposure to cold, dogs become sometimes suddenly paralytic, particularly in the hinder parts, having great tenderness and pain, and every appearance of lumbago. In every instance of this kind, there is considerable affection of the bowels, generally costiveness, always great pain. A warm bath, external stimulants, but more particularly active aperients, remove the colic. Colic, arising from costiveness, is not in general violently acute from the pain it produces; sometimes it appears accompanied with more spasm than is immediately dependent on the confinement of the bowels. In the former give active aperients, as calomel with pil. cochiæ, i. e. aloetic pill, and clysters; in the latter, castor-oil, with laudanum and ether.—*Blaine.*

COLLAR, *s.* A ring of metal put round the neck; the harness fastened about the horse's neck. A collar of brawn is the quantity bound up in one parcel.

COLLAR-BONE, *s.* The clavicle; the bones on each side of the neck.

COLOUR, *s.* The appearance of bodies to the eye; hue, dye; the appearance of blood in the face; in the plural, a standard, an ensign of war.

A general name given to the dyed wools and mohairs, which are used in forming the bodies of artificial flies. Mixing the wools, or producing, by a union of different colours, the

exact shade of the body of the insect to be imitated, is justly reckoned the greatest difficulty of the art; and I have known many persons tie a fly with neatness and elegance, who never could turn out a killing one. Hence practical acquaintance with the ephemeræ, which are imitated, is absolutely requisite for tying, as without it, the handsomest fly is inefficient.

To this may be ascribed the inferiority of the flies usually purchased in extensive fishing shops. Though, possibly, an elegant similitude of the intended insect in size and shape, they are, in tint and colouring, untrue to nature; and, as such, are easily discovered by the keen eye of the invited victim, and as certainly rejected. Without the precise colour of the fly is obtained, the handsomest production will be unsuccessful; and the neophyte will marvel that the basket of the rustic fisherman is filled, while his own showy imitations fail to rise a fish.

In choosing colours the brightness of the tint is to be less regarded than the permanency of the dye. To produce, at the same time, a brilliant and lasting colour, requires time, trouble, and experience. But for all the disciple of Walton will be well repaid; for nothing can be more mortifying to an angler, than to see the tints of his fly fade after a few immersions in the water, and a short exposure to the sunshine.

The receipts for dying wools and feathers, recommended in the Field Book, were given the compiler by Major Patrickson, an angler, who, in scientific and practical knowledge is, probably, second to none in Britain. They may, perhaps, be undervalued by modern philosophers; but from these simple and antiquated recipes, my accomplished friend produced the most beautiful and permanent colours; and I have, at this moment, in my possession, flies bodied with his wools, which have stood the test of water and weather, and are still as brilliant in their hue, as when they were first attached to the hook. *Vide* Fly Fishing.

Colour, *v.* To mark with some hue or dye; to palliate.

Colt, *s.* A young horse.

Colt's-tooth, *s.* An imperfect tooth in young horses.

Columba, (Linn.) *s.* A dove or pigeon. *Vide* Wood-pigeon.

Bill (save at the point, which is bent down) compressed and straight, the base of the upper mandible being covered with a soft gristly substance, in which the nostrils are placed towards the middle of the bill, forming a cleft lengthwise. The feet having three toes before entirely separated, with one hind toe articulated on the heel. Wings of middle size, the first quill rather shorter than the second, which is the longest in the wing.

Columbary, *s. obs.* A dove-cote.

Colymbus (Latham.) *s.* A diver; a genus thus characterised:—

Bill of middle size, strong, straight, much pointed, compressed. Nostrils at the sides of the base, concave, oblong, half shut by a membrane, pierced from part to part. Legs of middle length, drawn towards the belly beyond the equilibrium of the body; shanks compressed; three toes before, very long, entirely webbed; the hind toe short, articulated upon the shank, carrying a small loose membrane. Claws flat. Wings short; the first quill the longest. Tail very short and rounded.—*Montagu.*

Comb, *s.* An instrument to separate and adjust the hair; the top or crest of a cock; the cavities in which the bees lodge their honey.

Comforter (*Canis consolator*), *s.* A species of dog.

This beautiful little dog seems to be a cross betwixt the Maltese and the smaller spaniel described in the last section. His colour is generally white, with black or brown patches; his ears are long, and his head broad on the upper part, with an acute muzzle; the hair is long over the whole body, with the fore-legs feathered. His tail is curled, and feathered with very long hairs. This is the smallest of any of the distinct races of dogs, frequently not above a foot from the tip of the nose to the point of the tail.

This elegant little animal is used as a lap-dog, or as an attendant on the toilet or in the drawing-room. He is most affectionate to all the members of the family in which he resides; but is very snappish to strangers, whose familiarity he will seldom permit.—*Brown.*

COMMERCE, *s.* A game at cards.

Of this game there are two distinct methods of playing, the new and the old mode. The new way is played by any number of persons, from three to twelve, with a complete pack of 52 cards, bearing the same import as at whist, only the ace is reckoned as eleven. Every player has a certain quantity of counters, on which a fixed value is put, and each, at every fresh deal, puts down one for the stake. Sometimes the game is continued, or not finished, till one of the players has lost all the counters given at the commencement; but in order to prevent it from being spun out to an unpleasant length, or concluded too soon, it is often customary to fix the duration to a determinate number of tours, or times, so that the whole party shall deal once each completely round.

After determining the deal, the dealer, styled also the banker, shuffles the pack, which is to be cut by the left-hand player; then three cards, either altogether or one by one, at the dealer's pleasure, are given to each person, beginning on the right hand, but none are to be turned up. If the pack prove false, or the deal wrong, or should there be a faced card, there must be a fresh deal. There are three degrees or ranks in this game. The first, which takes place of all others, is what is called the tricon, or three cards of the same denomination, similar to pair royal at cribbage; the next in rank is the sequence, or three following cards of the same suit, like tierce at piquet; and the last, the point, being the greatest number of pips on two or three cards of a suit in any one hand. As to all these parts, the higher disannuls the lower. For the old method &c. *vide Hoyle.*

COMMON, *s.* An open ground equally used by many persons.

COMMONAGE, *s.* The right of feeding on a common.

CONCAVE, *a.* Hollow, opposed to convex.

CONDITION, *s.* Quality, that by which any thing is denominated good or bad; natural quality of the mind, temper, temperament.

Condition, as regards horses, is a term conventionally well understood; but beyond the precincts of the stable, it is neither precise nor technical. The term, in common parlance, might be supposed to imply nothing more than the symptoms and appearances which usually betoken health. Thus, when a horse is in perfect health, he ought, under this view of it, to be considered as in perfect *condition;* and, on the contrary, when a horse is in any respect out of heath, he should be considered as out of *condition;* that is, in a *condition* that neither fits him for perfect service to his owner, nor for perfect comfort to himself.

The accidental causes of this latter (morbid *condition*) are various; a very common one is found in injudicious feeding, both as to quality and quantity. Any sudden alteration in the articles of a horse's diet will frequently, according to the term of horse amateurs, "*throw him out of condition,*" such as removing him from the grass field or the straw yard to a full allowance of dry hay and corn, with a scanty supply of water "*to draw up his belly;*" all which are perhaps done at once, without the smallest preparation. In these cases the alimentary canal, being hardly yet in a state of digesting capacity, suffers from the increased powers necessary to draw nutriment from substances which, although in themselves more nutritious, yet are, in this instance, less digestible than those before in use. Thence follow costiveness, heat, and thirst; as well as an unhealthy state of the coat, which stares, and feels harsh and dry, being a necessary consequence of the ordinary sympathy between the stomach and the skin. A sudden remove from a generous to a poor diet is unfavourable to *condition* likewise; for in such case the chyle or nutritious pabulum, from whence all the vital organs are recruited, and all the vital energies derive their vigour, cannot be separated in sufficient quantities: the blood thereby becomes deteriorated; universal absorption takes place of the softer parts, which produces lessened bulk; while a laxity of fibre in the remaining portions is productive of langour and debility. The quality of the food is also of considerable consequence to the *condition.* Mow-burnt hay, by exciting a partial diabetes, is very apt to "*throw a horse out of condition.*" Musty hay, also, and oats highly kiln-dried, have an unfavourable effect on it also. The liquid aliments should likewise be attended to in a consideration of the *condition.* Mineral waters are unfavourable to it in most cases; although there is reason to believe that in some morbid affections they are salutary. Sea-water may be considered in the same light, but a continued use of the brackish water found near sea-bathing places, is unfavourable to the *condition* of such horses as have not been accustomed to it: to which, in union with the bad care taken of them in most of the livery stables of the sea-coast bathing, I attribute the universal complaint of the ill-condition in which they so frequently return from thence.

Badly ventilated stables, excess of clothing, and deprivation of water, are also frequent causes of *morbid condition*, as I have often witnessed: for, in some of these cases, after a course of purgatives, followed by alteratives and tonics, has failed, the more simple means of succulent food, a proper quantity of water, a well regulated but perfectly cool stable, with a free access of air, and very moderate clothing, have created an immediate change. An inordinate quantity of exertion, particularly if continued unremittingly for several days, will often produce *morbid condition*; and this in cases where the feeding has been, as supposed, equal to the tasks required. It is particularly likely to happen to young horses, and to such as have not been sufficiently prepared: in which cases, it is clear that the stomach, participating with the general debility, has a double task to perform in digesting a larger quantity of nutriment than usual, to make up the increased wants of the constitution; and thus the evil is increased by adding the further deterioration of this organ to the others. I know of no state of morbid condition which often proves so obstinate as this; and which is often found at last only to give way to a good salt-marsh run. Drastic purgatives, or violent remedies, as the mineral acids, when injudiciously continued, reduce the *condition* very quickly, and sometimes irrecoverably. Another principal cause of want of condition is the alternation of heat with cold. A sudden check to the natural or acquired heat of the body, particularly if aggravated by the evaporation of a perspiring state, and great previous exertion, as a sudden check after a severe burst with the hounds.

* * *

After a general enumeration of the causes of morbid condition, Mr. Blaine continues:—But to proceed with this important subject with some regularity, I would direct that in young plethoric horses, with much flesh on them, and which are, of all others, the most subject to take on this state of *morbid condition*, that one or two moderate bleedings may be premised, particularly in such as have been full fed for some time previous. If the inner surface of the eyelids, or of the nasal membranes, show any tinges of red, it is still more necessary to bleed; and in such cases I would repeat the same with moderation once or twice more, or until this inflammatory appearance should be removed. I have found this, united with mashing, in many instances sufficient to relax the hide and reduce the rugous tumefaction of the lampas. In most cases, however, some more active internal remedies will be found necessary with a young and plethoric patient: thus one or two very mild doses of physic, preceded by a nightly mash, into which ten grains of submuriate of mercury (calomel) has been mixed, are proper. If there be joined to the affected hide, and the swollen or clammy mouth of lampas, any eruptions on the skin, or any cracks of the heels, stable soiling, or even daily turning out to grass, are advisable; but as these cases usually happen when the animal is either at present wanted, or is intended soon to be used, so I have not mentioned *turning out* altogether; yet, if these appearances prove obstinate, such a course will be advisable, provided the season and other circumstances are favourable to the proceeding. But when neither the partial nor total turning out to grass is convenient, and when soiling is likewise not practicable, still the use of carrots as manger food can be resorted to. To this treatment may be added, after the administration of the physic, a nightly alterative.

Crude antimony .	of each 2 or 3 drs.
Supertartrate of potash (cream of tartar) .	
Nitrate of potash (nitre)	

Or,

Supertartrate of potash .	2 or 3 drs.
Nitrate of potash .	do.
Powdered sulphur .	¼ oz.

Both of these will gently stimulate both the stomach and kidneys, and produce, by consent of parts, a favourable effect on the skin, and hair also. Violent diuretics are never advisable; nor have I seen their mildest form, unaccompanied by other remedies, produce much good, unless there have been, in addition to the other symptoms, swelled legs, either with or without discharge.

When *morbid condition* arises in such horses as, from age, previous deprivations, severe work, long confinement in bad stables, or feeding on unwholesome provender, are not to be supposed plethoric; even then, if no actual debility is present, I have often derived great benefit by commencing the treatment with a very mild dose of physic, the horse being previously fully mashed, to make a small quantity of aloes sufficient; for I have generally found that the stomach tonics to be afterwards administered have had double effect from this previous preparation of the alimentary canal. But where the debility has been extreme, or where there has been already sufficient laxity of bowels, or perhaps even superpurgation from drastic physic, begin at once with either of the following tonics, or of any of those detailed under that head in the Materia Medica:—

Socotrine aloes, in powder .	1 dr.
Winter's bark, ditto . .	2 drs.
Ærugo (verdigris) .	1 dr.

Treacle or honey to form a ball.

Or,

Oxide of arsenic (arsenic) .	8 grs.
Pimento (allspice) in powder .	1 dr.

Extract of gentian	. .	½ oz.

Make into a ball with liquorice powder. Or,

Sulphate of copper	. .	1½ gr.
Sulphate of iron	. .	ditto
Powdered ginger	. .	1 dr.

Horse turpentine to form a ball.

Either of these formulæ may be given some time in each day, at the convenience of the practitioner or owner. It would, however, where practicable, be more prudent to let it be given in the morning, fasting, allowing the horse but a handful or two of hay for an hour after its exhibition. If a liquid form only can be got down, either of the above mixtures may be dissolved and horned down as a drink, with ale; but active mineral agents seem to produce their effect best in mass. In all cases of *morbid condition*, marked with emaciation and debility, a full allowance of carrots is advisable; and in default of them, or alternating with them, malt mashes or speared corn may be usefully brought in aid of the other tonics.

* * *

When a horse returns from grass, or straw-yard, both his external appearance, and the internal state of his body, in general, require considerable *alteration* before he can be said to be fit for the uses to which he is applied by man.

To promote '*condition*' in a horse from grass, his dieting and watering, the temperature to which he is removed, his clothing, grooming, and exercise, are the circumstances particularly to be attended to. Physicking is also a usual and necessary appendage to the other parts of the treatment.

It would be most imprudent to take a horse from so moist a food as grass, and at once to place before him hay and corn without caution or limitation. Coming from a straw-yard, this restraint is not so imperative; yet even in this case, little corn should be given at first: but following the removal from grass, both corn and hay should be allowed but sparingly, particularly the former. The hay given for the first two or three days should likewise be moistened, by sprinkling it with water; the corn allowed should also be mixed with bran, by which the dangers of constipation and repletion may be avoided. The constipating effects of the removal from a moist to a dry course of feeding, may be further obviated by a nightly bran mash. The bran mashing may likewise be extended to twice a day, or until the bowels be somewhat relaxed, if the horse be very full in flesh, or have his skin at all tight, or eruptive; or if the legs be inclined to swell. In all which cases it likewise tends to shorten the process, and prevent that almost irrecoverable hide-binding, which often follows these appearances, if succulent food, particularly carrots, be mixed with, or even wholly substituted for, hay. The privation of grass renders it prudent that water should at first be given in sufficient quantity: it is often withheld, with a view to harden the flesh and get up the belly: but this treatment at first is erroneous, and by exciting heat, thirst, and indigestion, frustrates its own intention. The *temperature* into which the newly-stabled horse is removed, should not at first be much increased beyond that to which he has been so long accustomed, or the sudden change may operate unfavourably on his lungs; and if it does not produce inflammation, it may at least occasion roaring, or broken wind. The most prudent plan is, first to place the horse in an airy box, which will not only prevent too great heat, but also obviate the danger of swelled legs, and heated feet. By degrees so much increase of temperature may be kept up, as will promote the fall of long hair, or the retention or renewal of the short: and in the degree to which the artificial coating is wished to be carried, to that degree should a temperate or an ardent climate be imitated. The *clothing* and grooming should, like the other parts of the conditioning treatment, be at first very moderate: the one produces extra heat, the other extra irritation; but by degrees both may be increased according to the views of the owner, or the purposes of the horse. *Physicking* is found to assist the *condition* of horses; for by emptying the bowels thoroughly, absorption of the extraneous fluids is promoted. One, two, or three doses, according to the extent to which the condition is intended to be carried, are usually given to every horse, where this process is conducted on the usual principles; and are certainly necessary, wherever continued and accelerated exertions are required. *Exercising* a conditioning horse, like the other aids, must be done with a due regard to circumstances. At first, walking alone best answers the purpose, and twice a-day is better than once: the duration of each walk must be regulated by the age, the fulness of habit, &c. &c. As the condition improves, trotting and galloping may be employed, to benefit the wind, draw up the carcass, and accustom the horse to full work. It may be here remarked, that I have seen all attempts to promote condition fail in a horse removed from an old companion, or when stabled alone. Horses are gregarious, and often bear segregation badly: such a case can only be treated by association.—*Blaine—Outlines of the Vet. Art—Nimrod on Condition—White, &c.*

Conger, *s.* The sea-eel.

Conirostres, (Cuvier,) *s.* Birds having concave bills.

CONTAGION, *s.* The emission from body to body by which diseases are communicated; infection; pestilence.

CONTAGIOUS, *a.* Infectious, caught by approach.

CONVULSE, *v.* To give an involuntary motion to the parts of any body.

CONVULSION, *s.* A convulsion is an involuntary contraction of the fibres and muscles; an irregular and violent motion, commotion.

CONEY, *s.* A rabbit, an animal that burrows in the ground.

COO, *v.* To cry as a dove or pigeon.

COOKERY, *s.* The art of dressing victuals.

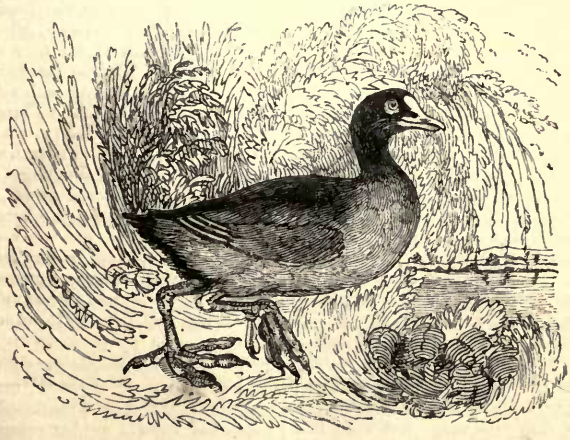
Cookery on the Moors.—No one merits or relishes a good dinner better than a grouse-shooter. It delights me to see my companion eat like a traveller; and, to please me, he should possess sufficient *acumen* to enable him to appreciate the fare. I despise the man who is cursed with a Spartan palate, and who hardly knows the difference between beef and mutton; and yet, in equal ratio, the *gourmand* is my abomination. There is a limit in culinary lore beyond which, as I opine, the sportsman should never travel. Like a soldier, he will sometimes find it serviceable to be able to direct the broiling of a steak, and the combination of a stew. To fabricate a curry, or even regulate a hash, may be tolerated; and in wild countries, like Ballycroy or the Scottish highlands, this knowledge will frequently be "worth a Jew's eye;" but every thing beyond this in kitchen accomplishments, is detestable. With one who composed omelets, and talked scholarly of the *materiel* of a plum-pudding—and I once had the misfortune to fall into a shooting party afflicted with such a personage—I would consort no more upon the heath, than I would shoot with a cook, or draw a cover with a confectioner. And yet, with these antipathies, I recommend the neophyte to make himself in every thing as independent as he can. A few practical lessons are worth a world of precept: one week's cooking in the moors will render him for life an adept; and if gun and angle fail him not, he will be able to command a dinner, without owing to the devil the compliment of a bad cook.—*Wild Sports.*

COOLNESS, *s.* Gentle cold, a soft degree of cold; freedom from passion.

COOMB, *s.* A measure of corn containing four bushels.

COOP, *s.* A cage, a pen for animals, as poultry or sheep.

COOT (*Fulica*, LINN.), *s.* A small black water-fowl.



Its characteristics are, bill strong, thick, sloping to a point; the base of the upper mandible rising far up into the forehead; both mandibles of equal length; nostrils

inclining to oval, narrow, short; body compressed; wings and tail short; toes long, furnished with broad scalloped membranes between each joint, on each side; the inner toe has two, the middle three, and the outer four scallops; and the hinder toe, one plain membrane adhering to its whole length.

Bald Coot.—(*Fulica atra*, Linn.—*Le Foulque au Morelle*, Buff.)—This bird generally weighs, when in full condition, about twenty-eight ounces, and measures fifteen inches in length. The bill is of a greenish white colour, more than an inch and a quarter long: a callous white membrane, like that of the water hen, but larger, is spread over the forehead, which also, as in that bird, changes its colour to a pale red in the breeding season: irides red; the upper part of the plumage is black, except the outer edges of the wings, and a spot under each eye, which are white; the under parts are of a hoary dark ash or lead colour. The skin is clothed with a thick down, and covered with close fine feathers; the thighs are placed far behind, are fleshy and strong, bare, and yellow above the knees; the legs and toes are commonly of a yellowish green, but sometimes of lead colour.

The common coot has so many traits in its character, and so many features in its general appearance like the rails and water hens, that to place it after them, seems a natural and easy gradation. Linnæus and other ornithologists, however, describe it as a genus distinct from those birds, and from the waders in general, on account of its being fin footed, and its constant attachment to the waters, which, indeed, it seldom quits. With it naturalists begin the numerous tribe of swimmers, and rank it among those that are the most completely dependent upon the watery element for their support: it swims and dives with as much ease as almost any of them; and also, like those which seldom venture upon land, it is a bad traveller, and may be said not to walk, but to splash and waddle between one pool and another, with a laboured, ill balanced, and awkward gait.

These birds skulk and hide themselves during the day among rushes, sedges, and weeds, which grow abundantly in the loughs and ponds, where they take up their constant abode: they rarely venture abroad, except in the dusk, and in the night, in quest of their food, which consists of the herbage, seeds, insects, and the slippery inhabitants of stagnant waters. It is seldom that the sportsman and his dog can force the coot to spring from its retreat; for it will, in a manner, bury itself in the mud rather than take wing: and when it is very closely pursued, and compelled to rise, it does so with much fluttering and apparent difficulty.

This species is met with in Great Britain at all seasons of the year; and it is generally believed that it does not migrate to other countries, but changes its stations, and removes in the autumn from the lesser pools or loughs, where the young have been reared, to the larger lakes, where flocks assemble in the winter. The female commonly builds her nest in a bush of rushes surrounded by the water; it is composed of a great quantity of coarse dried weeds, well matted together, and lined within with softer and finer grasses: she lays from twelve to fifteen eggs at a time, and commonly hatches twice in a season: her eggs are about the size of those of a pullet, and are of a pale brownish white colour, sprinkled with numerous small dark spots, which, at the thicker end, seem as if they had run into each other, and formed bigger blotches.

As soon as the young quit the shell, they plunge into the water, dive, and swim about with the greatest ease; but they still gather together about the mother, and take shelter under her wings, and do not entirely leave her for some time. They are at first covered with sooty coloured down, and are of a shapeless appearance: while they are in this state, and before they have learned, by experience, to shun their foes, the kite, moor buzzard, and others of the hawk tribe, make dreadful havoc among them; and this, notwithstanding the numerous brood, may account for the scarcity of the species.

Greater Coot.—(*Fulica aterrima*, Linn; *Le Grand Foulque au Morelle*, Buff.)—This is of a larger size than the last, but differs not in the colour of the plumage, except that it is blacker. Brisson distinguishes the two by the colour of the bare forehead, which is in this white; and the garters, which are of deep red. This bird is said to be found in Lancashire and in Scotland. It should seem to be a mere variety of the former, did not authors join in advancing the contrary. They are more plentiful on the continent, being found in Russia and the western part of Siberia very commonly, and are also in plenty at Sologne and the neighbouring parts, where they call it judelle. The people eat them on maigre days, and the flesh is much esteemed. —*Latham.* * *

A curious anecdote is related of a bald coot that built her nest in Sir William Middleton's lake, at Belsay, Northumberland. The rushes which contained it being afterwards loosened by the wind, the nest was driven about, and floated upon the surface of the water, in every direction; notwithstanding which, the female continued to sit as usual, and brought out her young upon her moveable habitation.

Cleaning Coots.—The recipe for this, is, after picking them, to take off all the black

down, by means of powdered white rosin and boiling water, and then to let them soak all night in cold spring water; by which they are made to look as delicate as a chicken, and to eat tolerably well; but, without this process, the skin, in roasting, produces a sort of oil, with a fishy taste and smell; and, if taken off, the bird becomes dry, and good for nothing. After all, however, these birds are in no way delicate, except when skinned; and after being soaked twenty-four hours in cold spring water, repeatedly changed, made into a pudding, by which, as with all such birds, when in puddings, pies, or soup, you can get rid of their strong skins without losing the juice of their flesh; and their fishy taste is, in a great measure, drawn off by steam.

Moor-hens may be cleaned in like manner, and, if in good condition, they will then be nearly equal to any wild fowl.—*Hawker.*

COPPER, *s.* One of the six primitive metals.

COPPER-CAP, *s.* A metallic covering fixed upon the nipple of a percussion gun, containing a fulminating composition, which explodes by the action of the cock and ignites the powder in the barrel. *Vide* PERCUSSION.

COPPERAS, *s.* A kind of vitriol.

COPPICE, *s.* Low woods cut at stated times for fuel.

COPSE, *s.* Short wood.

COPSE, *v.* To preserve underwood.

COPULATE, *v.* To come together as different sexes.

COPULATION, *s.* The congress or embrace of the two sexes.

CORACLE, *s.* A boat used in Wales by fishers.

CORDIAL, *s.* A medicine that increases the force of the heart, or quickens the circulation; any medicine that increases strength; any thing that comforts, gladdens, and exhilarates. Cordials are useful to give a temporary energy to the stomach and bowels, and stimulate the nervous system.

White says, "There is not a better cordial than about half a pint of good strong beer, with a little ginger grated into it. A wineglassful of brandy in half a pint of water is stronger, and may, on some occasions, be more useful; but I wish to impress on the reader, that, whenever a cordial appears necessary, we should give one of no greater strength than is sufficient to produce the desired effect; and it will be found, I think, that a much better effect may be produced by three or four small doses, or weak cordials, than by giving only one large dose."

CORDIALS.

1. From half a pint to a pint of the best old mild beer, with a little grated ginger.
2. Best Cognac brandy, from 2 to 4 oz.
   Warm water . . . 6 to 12 oz.
3. Anodyne carminative tincture . . . . 2 oz.
   Water . . . . 6 or 8 oz.
4. Allspice, powdered . . 2 to 4 drs.
   Caraway seeds (fresh), powdered . . . 4 dr. to 1 oz.
   Treacle enough to form a ball.
5. Ginger, powdered . . 1 dr.
   Allspice, powdered . 2 drs.
   Caraway seeds, powdered . 4 drs.
   Treacle enough to form a ball.

The cordials No. 4 and 5 may be given as a drench with a little water; and if the cordials 1, 2, and 3, were sweetened with treacle or sugar, they would be more palatable to the horse, and probably have a better effect. The above cordials are as well suited to cattle as to horses; and, though much stronger drenches are often given, those will be found, I think, of sufficient strength.—*White.*

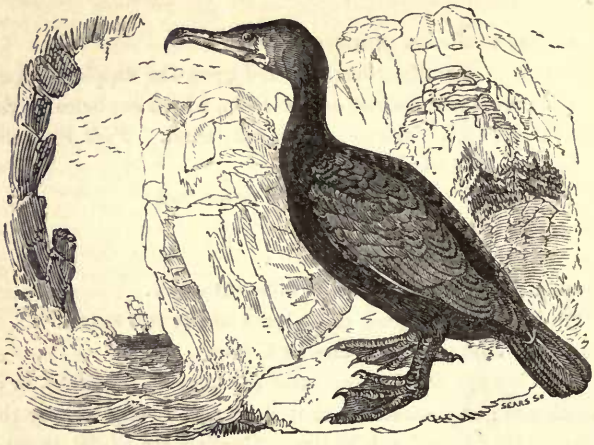
CORDIAL, *a.* Reviving, invigorating, sincere.

CORE, *s.* The heart; the inner part of any thing; the inner part of a fruit, which contains the kernel; the matter contained in a bile or sore.

CORIANDER, *s.* A plant.

Cork, *s.* A glandiferous tree, in all respects like the ilex, excepting the bark; the bark of the cork-tree used for stopples; the stopple of a bottle.

Cormorant, Cole Goose, or Great Black Cormorant, (*Pelicanus Corbo*, Linn.; *Le Cormoran*, Buff.) *s.* A bird that preys upon fish.



The weight of this species varies from four to seven pounds, and the size from thirty-two inches to three feet four or five in length, and from four feet to four feet six inches in breadth. The bill, to the corners of the mouth, measures four inches, and on its ridge two and three quarters; it is of a dark horn colour, and the tip or nail of the upper bill is much hooked and sharp; from the base of this it is furrowed on each side nearly to the tip, without any visible appearance of nostrils; the lower bill is compressed, and covered, about the gape of the mouth, with a naked yellowish skin, extended under the chin and throat, where it hangs loose, and forms a kind of pouch, which, together with the springing blade on each side, forming its rim, is capable of distension to a great width, and enables the bird to swallow prey apparently too large to be admitted into its throat; the skin about the eyes is also naked, and of the same colour as the pouch; the eyes, which have a remarkable wild stare, and are placed near the bill, look like two little greenish glass globes. The crown of the head, and the neck, are black; on the hinder part of the former the feathers appear elongated, and form a sort of loose short crest. In some specimens the throat is white, with a kind of stripe passing from it, upwards, behind each eye; in others the cheeks and throat are mixed with brown and white; and again, in others the head and neck are streaked with scratches of the latter colour. The middle of the belly is white, with a patch of the same colour over each thigh; all the under parts, however, together with the back and rump, are commonly of a glossy blue black, with green reflections: the shoulders, scapulars, and wing-coverts, are of a bronze brown, tinged and glossed with green, and each feather is bordered with shining blueish black; the secondary quills are nearly of the same colour; the coverts and the primaries are dusky. The tail consists of fourteen stiff husky feathers, which look as if they were discoloured by being dipped in mud or dirty kennel-water: the legs are thick, strong, black, and coarse, about two inches and a half long, and the outer toe is more than four in length.

The cormorant is found in every climate. In Greenland, where it is said they remain throughout the year, the jugular pouch is made use of by the natives, as a bladder to float their fishing-darts, after they are thrown; their skins, which are tough, are used for

garments, and their flesh for food; "but the eggs are too fetid to be eaten even by the Greenlanders."

* * *

These birds usually assemble in flocks on the summits and inaccessible parts of the rocks which overhang or are surrounded by the sea, upon which the female makes her nest of the withered sea-tang, weeds, sticks, and grasses, which are cast on shore by the waves: she lays four or more greenish-white eggs, of the size of those of a goose, but of a longer shape. There are writers who assert that, in some parts of the world, they build their nests on trees, like the rook and the heron; other authors, stricken with the singular conformation of the feet and serrated claws, have ascribed properties to them which they do not possess, and believe that they hold their prey in one foot, while with the other they push forward to the shore, or carry it thither, in the same manner, on the wing; but this seems mere conjecture, for the feet of this tribe are not fitted for any such purpose; they are, like those of all the expert divers, placed far behind; and while, by the position of these, and the powerful strokes from their broad webs, the bird is enabled to pursue and overtake its slippery prey, the hooked, sharp-edged beak is the only fit instrument both to catch and to secure it; and there is no need to use the awkward expedient of removing it afterwards to the foot.

At sea, or on the inland lakes, they make terrible havoc. From the greatest height they drop down upon the object of pursuit, dive after it with the rapidity of a dart, and, with an almost unerring certainty, seize the victim; then emerging with the fish across the bill, with a kind of twirl, throw it up into the air, and, dexterously catching it head foremost, swallow it whole.

While at rest on the shore, commonly on the ledge of a projecting rock, these birds sit, more or less, in an erect posture, and are propped up by the stiff feathers of the tail; and in places where they have not experienced the fatal effects of the gun, they have been known, however wary at other times, to sit and receive repeated shots, without offering to move out of the danger. At other times and places, while they sit in a dosing and stupified state, from the effects of one of their customary surfeits, they may easily be taken, by throwing nets over them, or by putting a noose around their necks, which they avoid no further than by slipping the head from side to side as long as they can.

Notwithstanding the natural wildness of their dispsition, it seems, according to some accounts, that certain species of these birds have formerly been tamed and rendered subservient to the purposes of man, both in this and other countries. Among the Chinese it is said they have frequently been trained to fish, and that some fishermen keep many of them for that purpose, by which they gain a livelihood. "A ring placed round the neck hinders the bird from swallowing; its natural appetite joins with the will of its master, and it instantly dives at the word of command; when, unable to gorge down the fish it has taken, it returns to the keeper, who secures it to himself. Sometimes, if the fish be too big for one to manage, two will act in concert, one taking it by the head and the other by the tail." In England, according to Willoughby, "when they came to the rivers, they take off their hoods, and having tied a leather thong round the lower part of their necks, that they may not swallow down the fish they catch, they throw them into the river. They presently dive under water, and there for a time, with wonderful swiftness, they pursue the fish; and when they have caught them, they arise presently to the top of the water, and pressing the fish lightly with their bills, they swallow them, till each bird hath in this manner swallowed five or six fishes; then their keepers call them to the fist, to which they readily fly, and, little by little, one after another, vomit up all their fish, a little bruised with the nip they gave them with their bills. When they have done fishing, setting the birds on some high place, they loose the string from their necks, leaving the passage to the stomach free and open, and for their reward they throw them part of the prey they have caught, to each, perchance, one or two fishes, which they by the way, as they are falling in the air, will catch most dexterously in their mouths."

Whitelock tells us "That he had a cast of them manned like hawks, which would come to hand." He took much pleasure in them, and relates, that the best he had was one presented to him by Mr. Wood, Master of the Cormorants to Charles the First.

Dr. Heysham relates that, about the year 1759, one of these birds "perched upon the castle at Carlisle, and soon afterwards removed to the cathedral, where it was shot at upwards of twenty times without effect; at length a person got upon the cathedral, fired at, and killed it." "In another instance, a flock of fifteen or twenty perched, at the dusk of evening, in a tree on the banks of the river Esk, near Netherby, the seat of Sir James Graham. A person who saw them settle, fired at random at them in the dark six or seven times, without either killing any or frightening them away: surprised at this, he came again, at day-light, and killed one, whereupon the rest took flight."—*Bewick—Latham—Willoughby, &c.*

Corn, *s.* The seeds which grow in ears, not in pods; grain unreaped; grain in the ear, yet unthrashed; an excrescence on the foot, hard and painful.

Corns are a very common and a very troublesome disorder, and may truly be said to be often occasioned by the smith, being generally in consequence of bad shoeing. Corns most commonly happen in white feet with weak low heels; but they are too common in feet of all colours. They are occasioned by the pressure of the heel of the shoe, either by its bearing directly on the sole when it is too thin to bear the pressure, or by its forcing the heel of the crust inwards. In this way the sensible sole and laminæ are bruised, their blood-vessels ruptured, and the blood penetrates into the pores of the horn, causing the dark red appearance observable on removing the shoe, and scraping off the surface of the sole. This bruised part is exceedingly tender, and incapable of bearing the pressure of the shoe, and so are the crust and bar on each side of it. In the treatment of this complaint all this must be cut away, that is, all the parts must be so cut down, crust, bar, and sole, that when a bar shoe is applied it may be full half an inch distant from its surface. In this way a horse will be able to do his work, provided the shoe is removed, and the heel pared down as often as is necessary. As in this case the frog will be constantly receiving considerable pressure from the bar shoe, it is necessary to take care that the heels are not too thick and inflexible, in which case it is necessary to rasp them; and whenever there is a morbid degree of heat in the feet, or dryness, they should be kept constantly moist and cool in the stable, either by poultice or by several folds of old woollen wrapped round the coronet, and kept constantly wet. The common practice of pairing *out* the corn and leaving the bar and crust to be in contact with the heel of the shoe, is doing no good, nor would it afford even temporary relief, if the shoe were not bent up or made to bear off that quarter a little, as they term it; yet after riding a few miles the shoe is sure to yield to the horse's weight, and bear upon the tender heel. It is thus that corns are made so troublesome as we find them, and many horses are rendered nearly unserviceable, or absolutely ruined by this improper treatment. Matter is often formed within the heel from this sort of management, and breaks out at the coronet, frequently doing great mischief, and even rendering the horse useless. When corns have been suffered to go this length the foot must be poulticed, and all the hollow horn cut away. After the inflammation has been thus completely subdued, the sensible parts which have been laid bare may be dressed with Friars' balsam and the tar ointment. The radical cure of corns is always practicable if taken early, but in old cases the sensible parts will always remain in a tender state, however carefully they may be treated, and will always require the defence of the bar shoe, applied as I have described. A run at grass *without shoes* is a great relief to a horse with corns, provided the tender heel is cut down as I have described, and the heel and quarter rasped very thin. When a radical cure is attempted, this is the most likely means of effecting it.—*White.*

Corncrake. (*Vide* Landrail.)

Corneous, *a.* Horny, of a substance resembling horn.

Cornet, *s.* Cornet of a horse, is the lowest part of his pastern that runs round the coffin.

Corpulent, *a.* Fleshy, bulky.

Corroborant, *a.* Having the power to give strength.

Corrode, *v.* To eat away by degrees.

Corrosion, *s.* The power of eating or wearing away by degrees.

Costive, *a.* Bound in the body; close, unpermeable.

Costiveness, *s.* The state of the body in which excretion is obstructed.

Cot, *s.* A small house, a hut, a bed.

Cotton, *s.* The down of the cotton tree; a plant; cloth or stuff made of cotton.

Couch, *v.* To lie down in a place of repose; to lie down on the knees, as a beast, to rest; to lie down in ambush.

COUCHANT, *a.* Lying down, squatting.

COVE, *s.* A small creek or bay; a shelter, a cover.

COVER, *v.* To overspread any thing with something else; to hide by artificial appearances; to brood on; to copulate with a female.

COVER, *s.* Any thing that is laid over another; a concealment, a screen; shelter; a wood, a thicket or place planted with furze or brushwood; a breeding place for foxes. To *draw* a cover—to search it for foxes, by sending the hounds through.

Judicious huntsmen will observe where foxes like best to lie; this must, of course, vary in different countries, and a knowledge of the country will best direct them in this respect. Where there are large tracts of cover, such observation will save time in finding; generally speaking, foxes prefer covers that lie high, are dry and thick at the bottom, that are out of the wind, and are on the sunny side of hills. The cover where a fox is found, when it has remained still any time, will probably produce a second. In nutting time, furze-brakes and two or three years' coppices are the only quiet places for a fox to kennel in; when pheasant-shooting begins, older covers are more likely. The season when foxes are most wild and strong, is near Christmas; a huntsman must, at that season, lose no time in drawing, and be as silent as possible; three or four years' coppices, with heath or furze at the bottom, are then most likely. The male foxes, about Christmas, travel miles after the females, and, when hunted, generally run directly for the country from whence they came; the compiler has at that season, in the course of three weeks, killed two brace of dog-foxes from one cover, where the least distance was twelve, and in one of the four chases was extended to double the number of miles, from the place of unkennelling, to the spot where the fox was killed.

When a string of small covers have plenty of foxes in them, some caution is necessary to prevent their being all disturbed in one day. Foxes are said to go down wind to their kennel, but, however that may be, the huntsman should begin drawing at the farthest cover down the wind, and proceed from cover to cover up the wind, till he finds; these advantages will attend it; he will draw the covers more speedily, there will be less difficulty in getting hounds away, and as the fox most likely will run to the covers already drawn, there is the less probability of changing, and the covers which are up the wind, beyond where the fox is found, remain perfectly undisturbed.

Never hunt the small, until the large covers have been well rattled; for it would be bad policy to drive from the former to the latter to increase the number. If foxes are meant to be thinned and dispersed, hounds must throw off at the same cover, as long as a fox can be found. Hounds that come away with the first fox that breaks, do not disturb the cover, and may expect to find there again the next day; but where foxes are scarce, the same cover should never be drawn two days following.

Furze covers cannot be drawn too close, and if a fox is there found, he should never be hallooed until quite clear of them; from such places, hounds are sure to go off well with him; and it would be the height of cruelty to head him back into the hounds' mouths.

* * *

Much depends on the first finding a fox, who, if well found, may be said to be half killed. The huntsman should draw quietly, and up the wind; this is material; the fox, by drawing up the wind, does not hear the approach of the hounds, who by this means are also within hearing; besides, should the fox turn down the wind, as most probably he will, it lets the hounds all in. If covers are small, and from which a fox cannot break unseen, noise can then do no hurt, but late in the season foxes are wild, particularly in covers that are often hunted; and should there be any noise, they will slink their kennels and get too much advantage; the whipper-in, where this is suspected to happen, should get the opposite side of the cover, before the hounds are thrown into it.

* * *

When foxes are numerous, there is no occasion for an early hour, and when they are weak, by hunting late, they give better chases; when foxes are strong, hounds ought then to have the advantage which hunting early affords them. When hounds go out late, they should immediately proceed where it is likely to find, which, for the most part, is that cover where hounds have been least in; if a fox is not soon found, a long and tiresome day is generally the consequence; when the cover is thick, particularly if it be furzy, it should be drawn slowly; a fox at a late hour will keep his kennel until hounds come close upon him. —*Beckford.—Daniel.*

COVERT, *s.* A shelter, a defence. Coverts of the Tail, (*Uropygium*, LINN.), in Ornithology, are feathers which cover the tail on the upper side, at the base.

COVEY, *s.* A hatch, an old bird with her young ones; a number of birds together.

COUGH, *s.* A convulsion of the lungs.

COUGH, *v.* To have the lungs convulsed; to make a noise in endeavouring to evacuate the peccant matter from the lungs.

Chronic Cough.—It may appear strange to a person unacquainted with the animal economy, that what is taken into the stomach should affect the mucous membrane of the lungs, and that of the larynx, which is the seat of chronic cough. It is in the following manner: when the stomach is distended by hay, and especially if that hay is bad, it is gradually weakened, and rendered incapable of performing its office properly; hence the chyle is crude, and unfit for the purpose it was intended for, that is, forming pure blood. By this imprudent method of feeding them, the blood is rendered impure, and of course all the secretions become so likewise. Thus it is that the bland mucous fluid, formed upon the internal membrane of the wind-pipe and its branches, for the purpose of defending and lubricating it, becomes saline and acrimonious, and a source of constant irritation: hence arises the cough. It is commonly observed, that horses with chronic cough have immoderate appetites both for hay and water; and though people have suspected some connexion between this circumstance and the cough, they have not perceived the entire dependence of the cough upon it, which they might easily have done by a very simple experiment. Let a horse affected with chronic cough be fed moderately upon green food only, and it will generally be found that the chronic cough will gradually go off. But let the horse return to his former method of feeding, and the disease will quickly reappear.

There is no occasion to say much on the treatment and prevention of this disorder, when arising from improper feeding. It may be useful, however, to observe, that when the appetite has been depraved, and the digestive power weakened by long continued improper feeding, they cannot be suddenly restored: and it will often require a steady pereverance in a careful system of feeding, and the use of diuretic medicine, in such a way, however, as to keep up only a moderate degree of increased action in the kidneys, without injuring those organs, or affecting the stomach: and this may be accomplished by giving half an ounce of nitre in a little corn twice or three times a day, or the powder described afterwards. If a horse is inclined to eat his litter, he should be muzzled during the night, and in the day time it should be taken from him.

Chronic cough is sometimes a consequence of a violent attack of catarrh or strangles, especially when there has been considerable soreness and inflammation of the throat, extending, in some degree, perhaps, to the larynx. Roaring often originates in the same cause. I have known an obstinate chronic cough cured by drenches composed of oxymel, or a syrup made with treacle and vinegar; also by a decoction of garlic with linseed oil. Barbadoes tar and oil, with balsam of sulphur, have also been employed as remedies for cough. It is not improbable that these drenches, by stimulating the throat, may improve the secretion of the mucous membrane of the larynx, or render it less irritable.

Blistering the throat externally may also be of use. In the human subject, gargles, made of infusion of Cayenne pepper, have been employed in hoarseness, and a syrup made from a decoction of horse-radish; with a view, probably, of improving the mucous secretion of the larynx. Opium will frequently put a stop to chronic cough for a day or two; but its effect, I believe, is never permanent. This seems to prove, however, that the cough depends, in some measure, on a morbid sensibility of the larynx.

REMEDIES.

COUGH BALL.

No. 1.	Gum ammoniac . .	2 or 3 drs.
	Powdered squills .	1 dr.
	Camphor . . .	1 dr.
	Ginger . . .	1 dr.
	Castile soap . .	2 drs.
	Oil of aniseed . .	20 drops.

Syrup and flour enough to form the ball.

No. 2.	Strained turpentine . .	8 oz.
	Yellow resin . .	4 oz.
	Olive oil . . .	2 oz.
	Hard soap . . .	8 oz.

Put these in a pan over a slow fire, and, when perfectly melted, stir in of powdered ginger six ounces; allspice, powdered, six ounces; liquorice powder, or linseed powder, enough to form a mass fit for making balls. The dose, from one and a half to two ounces,

to be given for two or three successive mornings, or until it acts as a diuretic. When a horse, affected with cough, becomes costive, a clyster may be thrown up; or he may be kept chiefly on green food, or bran mashes, for a few days. I have observed, in some cases, that the cough-ball has been more efficacious when preceded by a mild purgative with a drachm of calomel. The following powder has sometimes been found a good remedy for coughs, especially when the horse's diet and exercise have been carefully attended to; and in cases where the cough has appeared to be confined to the larynx the following drench has done good. *Vide* BLAINE.

Take of nitre, levigated antimony, and powdered resin, of each two or three drachms; mix for one dose, and give it every morning in a mash until it acts as a diuretic. When cough happens to young horses, and the membranes of the eye appear red, the loss of a little blood, and a clyster, are likely to do good.

DRENCH FOR COUGH.

Bruise three ounces of fresh squills in a mortar, or four or five ounces of garlic; and macerate in twelve ounces of vinegar in a slow oven, or on a hot plate, for an hour; strain off the liquid part, and add to it treacle or honey one pound. The dose should be three or four ounces in bad coughs; where there appears great irritation in the larynx, two teaspoonfuls or one tablespoonful of tincture of opium may be added to two or three doses. A dose may be given every morning.—*White.*

COULTERNEB, (*Fratercula arctica*, BRISS.) *s.*

The weight of this species is between twelve and thirteen ounces; length exceeds twelve inches. The bill is of a very singular form; it is about an inch and a half deep at the base, much compressed sideways, and arched, but ends in a point, where the upper mandible is a little hooked: at the base of this mandible is an elevated rim, full of small punctures of a light colour; next to which is a space of blueish grey, at the bottom of which the nostrils are lodged at the edge, which is a long narrow slit; from thence it is orange-coloured with four oblique furrows; the under mandible corresponds in colour, but has only three furrows; irides hazel, in some greyish; orbits, red; above the eye is a triangular callous protuberance, beneath an oblong one; the top of the head and whole upper parts are black, passing round the neck in a collar; the sides of the head and all the under parts are pure white; the chin in some is grey, in others white, and the cheeks are grey; quills dusky; tail short, and consists of sixteen feathers; legs and feet orange; claws black, the inner one much hooked.

It is remarked that the bill of this bird varies much according to age; at first it has no furrows, and is of a dusky-colour, the yellow colour and furrows increasing with age.

These birds appear on many parts of our rocky coasts about the middle of April, and begin to breed about the middle of May. On the stupendous cliffs of Dover, and such places, they deposit their single eggs, in the holes and crevices; in other places they burrow like rabbits, if the soil is light; but more frequently take possession of rabbit-burrows, and lay their egg many feet under ground. This is the case on Priestholm Isle off the coast of Anglesea, and other small islands off St. David's-head, where the soil is sandy.

If the coulterneb is, however, a robber of rabbit-burrows, it is too formidably armed to allow of retaliation with impunity, and few birds or beasts dare venture to attack it in its retreat. Sometimes, however, as Jacobson tells us, the raven makes bold to offer battle; but as soon as he approaches, the coulterneb catches him under the throat with her beak, and sticks her claws into his breast till he screams out with pain and tries to get away; but the coulterneb keeps fast hold of him and tumbles him about till both frequently fall into the sea, where the raven is drowned, and the coulterneb returns in triumph to her nest. But should the raven, at the first onset, get hold of the coulterneb's neck, he generally comes off victorious, kills the mother, and feasts on her eggs or her young." On St. Margaret's Island, near St. David's, we have seen the fishermen draw them out of their holes in a singular manner; by introducing the hand into the hole, which is seized by the bird, who suffers himself to be drawn out rather than loose his hold. In other places they are caught by ferrets, and the young are pickled.

About the latter end of August they retire from our coast, and have all completely migrated by the beginning of September, together with the razor-bills and guillemots.

The egg is white, but is occasionally found obscurely speckled with cinereous, about the size of a hen's; their principal food is small fish, particularly sprats, with which they feed their young. It is not known to what parts they retire when they leave our coast, but they have been found in abundance in various parts of the southern and northern hemisphere. —*Montagu.*

COUNTER, *s.* A false piece of money used as a means of reckoning.

COUNTER, *ad.* Contrary to, in opposition to; the wrong way; contrary ways.

COUPLE, *s.* A chain or tie that holds dogs together; two, a brace; a male and his female.

COUPLE, *v.* To chain together; to join to one another; to join embraces.

COURSE, *s.* Race, career; track or line in which a ship sails; a tract of ground set apart for horse-racing.

The following are the abbreviations used in designating the different courses at Newmarket, with their respective measurements; as also, other abbreviations used, in describing races, throughout the united kingdom.

		M.	F.	Y.
B. C.	The Beacon course .	4	1	138
L. T. M.	Last three miles of do.	3	0	45
D. I.	From the ditch in . .	2	0	97
T. L. I.	From the turn of the lands in	0	5	184
C. C.	Clermont Course . .	1	5	217
A. F.	Across the flat . . .	1	1	44
T. Y. C.	Two-year-old course .	0	5	136
Y. C.	Yearling course . .	0	2	147
R. C.	Round course . . .	3	6	93
D. M.	Ditch mile	0	7	184
A. M.	Abingdon mile . .	0	7	211
R. M.	Rowley mile . . .	1	0	1
T. M. M.	Two middle miles of B.C.	1	7	115
D. C.	Duke's course.			
F. C.	Fox's course.			
An. M.	Ancaster mile.			
B. M.	Bunbury's mile.			
C. S. C.	Craven stakes course.			
M. D.	Mile and distance B. C.			

COURSE, *v.* To hunt, to pursue; to pursue with dogs that hunt in view; to put to speed, to force to run.

COURSER, *s.* A swift horse.

COURSING, *s.* The pursuit of hares with greyhounds.

The ancient Laws of Coursing established by the Duke of Norfolk in queen Elizabeth's reign, and agreed to by the nobility and gentry who then followed the diversion, have been always held authentic.

The Feuterer, or person who lets loose the greyhounds, was to receive those that were matched to run together into his leash, as soon as he came into the field, and to follow next to the hare finder, or him that was to start the hare, until he came to the form, and no horse or footmen were to go before, or on either side, but directly behind for the space of about forty yards.

A hare was not to be coursed with more than a brace of greyhounds.

The hare finder was to give the hare three soho's before he put her from her form, to give notice to the dogs that they may attend her starting.

The hare was to have twelve score yards law before the dogs were loosed, unless the small distance from the cover would not admit it without danger of immediately losing her.

The dog that gave the first turn, and during the course, if there was neither cote, slip, nor wrench, won.

A cote is when the greyhound goes endways by his fellow, and gives the hare a turn.

A cote served for two terms, and two trippings or jerkins for a cote; if the hare did not turn quite about, she only wrenched, and two wrenches stand for a turn.

If there were no cotes given between a brace of greyhounds, but that one of them served the other at turning, then he that gave the hare most turns won; and if one gave as many turns as the other, then he that bore the hare, won.

A go-by or bearing the hare was equivalent to two turns.

If neither dog turns the hare, he that led last to the cover won.

If one dog turned the hare, served himself and turned her again, it was as much as a cote, for a cote was esteemed two turns.

If all the course were equal, the dog that bore the hare, won; if the hare was not borne, the cause was adjudged dead.

If a dog fell in a course, and yet performed his part, he might challenge the advantage of a turn more than he gave.

If a dog turned the hare, served himself, and gave divers cotes, and yet in the end stood still in the field, the other dog, if he ran home to the cover, although he gave no turn, was adjudged the winner.

If by accident a dog was rode over in his course, the course was void, and he that did the mischief was to make reparation for the damage.

If a dog gave the first and last turn, and

there was no other advantage betwixt them, he that gave the odd turn won.

He that came first at the death, took up the hare, saved her from being torn, cherished the dogs, and cleansed their mouths from the wool, was adjudged to have the hare for his trouble.

Those that were judges of the course, were to give their decision before they departed out of the field.

Cow, *s.* The female of the bull.

Crab, *s.* A shell-fish; a wild apple, the tree that bears a wild apple.

Craber, *s.* The water-rat.

Crack, *s.* A sudden disruption; chink, fissure, narrow breach; the sound of any body bursting or falling; any sudden and quick sound; any breach, injury, or diminution; a flaw.

Cracks or Ulcers in the Heels are very painful, often cause lameness, and, from improper treatment, often prove very obstinate. An emollient poultice should be first applied, and continued for a few days, or until the inflammation has completely subsided. The crack, or ulcer, as well as all the hollow part of the pastern or heel, should be covered with the following paste, which is to remain two or three days, and then washed off and repeated. When the crack is perfectly healed or dried up by this astringent paste, a little salad oil or fresh hog's lard is often necessary to supple the part. In obstinate cases it is necessary to keep the horse perfectly at rest until the crack is healed, and sometimes to apply the following ointment, spread on a pledget of tow, and confined by a bandage:—

Take of litharge plaster . .	2 oz.
Best salad oil . . .	1 oz.

Melt slowly, and when removed from the fire, continue stirring until it is cold.

Three of these dressings will generally cure the disorder. During this treatment the horse must not be taken out for exercise, but be turned loose into a cool box or out-house, where he may move himself about gently. As he takes no exercise during this time, he should be fed with bran mashes, and have only very little hay, as his bowels would otherwise be loaded with excrement, and much mischief might thereby be done. Though the disease is entirely local, it may not be amiss to give half an ounce of nitre once or twice a day in his mash.

Horses that are constantly kept trimmed out in the heels, often lose the hair from the part by the constant friction of the dirt in the roads; and, besides the deformity this occasions, they are still more liable to those painful cracks. I have lately found the following treatment successful. If the cracks are very painful, poultice for one day and night, then wash them three times a day with the following lotion, for one or two days; after this apply the astringent ointment, which generally heals them in a short time:—

LOTION.

Super-acetate of lead and sulphate of zinc, of each . .	2 dr.
Water	3 oz.

Mix.

ASTRINGENT OINTMENT.

Super-acetate of lead, sulphate of zinc, vinegar, of each two drachms, rub well together in a large mortar; then add melted hog's lard, four ounces, and continue stirring briskly until perfectly incorporated and nearly cold.—*White.*

Craft, *s.* Manual art; cunning; small sailing vessels.

Crag, *s.* A rough steep rock; the rugged protuberances of rocks; the neck.

Cram, *v.* To stuff, to fill with more than can conveniently be held; to fill with food beyond satiety; to fatten fowls.

Barley and wheat meal are generally the basis or chief ingredient, in all fattening mixtures for chickens and fowls; but in Sussex, ground oats are used, and in that county, I think, oats are in higher repute for fattening than elsewhere, many large hogs being there fattened with them. The food given them is ground oats made into gruel, mixed with hogs' grease, sugar, pot-liquor, and milk: or ground oats, treacle, and suet, sheeps' plucks, &c. The fowls are kept very warm, and crammed morning and night. The pot liquor is mixed with a few handfuls of oatmeal and boiled, with which the meal is kneaded into crams or rolls of a proper size. The fowls are put into the coop, two or three days before they are crammed, which is continued for a fortnight, and they are then sold to the higglers.

Those fowls, full grown, weigh seven pounds each, the average weight five pounds, but there are instances of individuals double the weight.

The Workingham method of feeding is to confine the fowls in a dark place, and cram them with a paste made of barley-meal, mutton suet, treacle, or coarse sugar, and milk, and they are found completely ripe in a fortnight. If kept longer, the fever that is induced by this continued state of repletion renders them red and unsalcable, and frequently kills them.—*Moubray.*

CRAMP, *s.* A spasm or contraction of the limbs; a piece of iron bent at each end, by which two bodies are held together; an implement for removing or replacing the main-spring of a gun lock.

CRAMP, *v.* To pain with cramps or twitches; to restrain; to bind with cramp-irons.

CRANE, *s.* A bird with a long beak; an instrument made with ropes, pulleys, and hooks, by which great weights are raised.

CRAW, *s.* The crop or first stomach of birds.

CRAW-FISH, *s.* A small shell-fish found in brooks.

CREANCE, *s.* In Falconry, a long and light string, which must always be tied to the leash when lessons are given to a young hawk.

CREST, *s.* Any tuft or ornament of the head.

CRESTED, *a.* Adorned with a plume or crest; wearing a comb.

CRETACEOUS, *a.* Abounding with chalk, chalky.

CREW, *s.* A company of people associated for any purpose; the company of a ship.

CRIB, *a.* The rack or manger of a stable; the stall or cabin of an ox.

Crib-biting, though only a trick or habit which a horse gets, and which he may teach another that stands next him, especially a young horse, may be considered as a disorder, because it renders him very liable to indigestion and flatulent colic. There is no doubt that in crib-biting a horse swallows air, and I have seen a horse distend his stomach and bowels with it in an enormous degree, and he would thereby often get the flatulent colic, and sometimes swell himself that he could scarcely move. The only convenient method of preventing crib-biting is to put a leather strap round the neck, close to the jaws, which prevents him from laying hold of the manger; it may impede his feeding, however, and this must be attended to. A muzzle sometimes answers the purpose.

The compiler has known horses effectually cured of crib-biting by merely leaving them loose in the stable.—*White.*

CRIBBAGE, *s.* A game at cards.

Cribbage, a game differing from all others by its immense variety of chances, and generally reckoned useful to instruct young people in the science of calculation, is played several ways, either by two, three, or four persons, with five, six, or sometimes eight cards: the rules also vary a little in different companies; but the following are those most generally allowed.

The dealer may discover his own cards, though if he show any of the adversary's, the adversary is entitled to mark two points, and is also at liberty to call a fresh deal.

Should too many cards be dealt to either party, the non-dealer may score two points, and likewise demand another deal, upon the error being detected previous to taking up the cards; but if he should not choose a new deal, the extra cards must be drawn: and when any player is observed to have in hand more than the proper number of cards, the opponent may set up four points, and also call a new deal.

If any player meddle with the cards after dealing, till the period of cutting them for the turn-up card, his opponent may score two points.

When any player scores more than he is entitled to, the other party may not only put him back as many points as are overmarked, but likewise score the same extra number for his own game.

Should either party meddle even with his own pegs unnecessarily, the opponent may take two points, and if any one take out his front peg, he must place the same back behind the other; though when any are misplaced by accident, a by-stander is to replace the same according to the best of his judgment, but never otherwise interfere.

When any player miscalculates, or neglects to set up what he is entitled to, the adversary is, in some companies, allowed to take the points so omitted; but in other companies this rule is not observed, the inattentive player being only prohibited from afterwards scoring them.

Each player may place his own cards, when done with, on the pack.

In five-card cribbage, the cards are to be dealt one by one alternately; but when played with six cards, it is customary to give three, and if with eight cards, four at a time.

The non-dealer, at the commencement of the game, in five-card cribbage, scores three points, called taking *three for last;* but in six and eight-card cribbage this is not done.

Some parties permit flushes in play to be reckoned, when three or more cards of a suit are laid down successively; that is, the person playing the third card reckons three, and the player laying down a fourth of the same suit scores four, and so on if five, six, or more can be played.

CRICKET, *s.* An insect that chirps about ovens or fire-places; a sport.

Of all the English athletic games, none perhaps presents so fine a scope for bringing into full and constant play the qualities both of the mind and body as that of cricket. A man who is essentially stupid will not make a fine cricketer; neither will he who is not essentially active. He must be active in all his faculties—he must be active in mind to prepare for every advantage; and active in eye and limb, to avail himself of those advantages. He must be cool-tempered, and, in the best sense of the term—MANLY, for he must be able to endure fatigue, and to make light of pain; since, like all athletic sports, cricket is not unattended with danger, resulting from inattention and inexperience. The accidents, however, attendant upon the players at cricket commonly arise from unwatchfulness, or slowness of eye. A short-sighted person is as unfit to become a cricketer, as one deaf would be to discriminate the most delicate gradations and varieties in tones; added to which, he must be in constant jeopardy of serious injury.

This noble game is thoroughly British. Its derivation is probably from the Saxon "cnỳce a stick." Strutt, however, in his "Sports and Pastimes," states that he can find no record of the game under its present appellation "beyond the commencement of the last century, where it occurs in one of the songs published by D'Urfey." The first four lines of "Of a noble race was Shenkin," run thus:—

"Her was the prettiest fellow
At foot-ball or at *cricket*,
At hunting chase, or nimble race,
How featly her could prick it."

The same historian of our games doubts not that cricket derived its origin from the ancient

game of club-ball, the patronymics of which being compounded of Welsh and Danish (*clwppa* and *bol*) do not warrant his conclusion, the Saxon being an elder occupant of our island. The circumstance, however, of there being no illustration extant—no missal illuminated with a group engaged in this king of athletic games, as is the case with its plebeian brother, the club-ball; also from its constitution being of a more civil and complicated character, we may rationally infer that it is the offspring of a more polite, at all events of a maturer age, than its fellow. The game of club-ball appears to have been no other than the present well-known bat-and-ball, which, with similar laws and customs prescribed in the playing at it, was doubtless anterior to trap-ball. The trap, indeed, carries with it an air of refinement in the "march of mechanism."

They who are acquainted with some of the remote and unfrequented villages of England, where the primitive manners, customs, and games of our ancestors survive in the perfection of rude and unadulterated simplicity, must have remarked the lads playing at a game which is the same in its outline and principal features as the consummate piece of perfection that at this day is the glory of "Lord's," and the pride of English athletæ;—I mean the one in which a single stick is appointed for a wicket, ditto for a bat, and the same repeated, of about three inches in length, for a ball. If this be not the original of the game of cricket, it is a plebeian imitation of it.

The constitution of this pastime has undergone considerable alterations and improvements since it has become a favourite and fashionable recreation. Even till as late as the year 1770, for instance, the wicket had consisted of two stumps, when a *third*, the centre one, was added:—a decided improvement; seeing that it multiplied the chances to the batter of being bowled out, consequently increased the difficulty of his position, and thereby exalted his maintaining it for any length of time into the greater merit: for, under the old system, if the ball passed between the stumps, the batter was not considered out; under the improved system, such an event cannot happen; for the three stumps are not pitched at so great a distance from each other as to allow of the transit of the ball without knocking off the bale, which decides the fate and existence of the bats-man. The bale too, which crowns the stumps, formerly consisted of a single piece of wood, and therefore required a considerable concussion of the ball to remove it, without which the batter cannot be declared out; it is now divided in the centre, and consequently a very slight agitation of either of the outside stumps will displace the one half resting upon it; and this is equally fatal to the batsman as if the two were knocked off.

The formation of the bat has also undergone considerable change and improvement. In an old code of "the Laws of Cricket, revised at the Star and Garter, Pall-mall, on February 25, 1774, by a committee of noblemen and gentlemen," the rules and directions are prefaced by a wood-cut of the bat then in use, by which it appears that it was curved, and the face flat.

The modern bat is not only perfectly upright, but its face is convex, which again increases the difficulty to the player; for, in striking the ball, unless he meet it directly in the centre of his bat, the chances are many, that, from the convexity in the face of the bat, the ball will fly off in a diagonal line, and the player may be caught out. The mode of holding the bat has changed with its alteration of form; the chief injunction now being to a young player to keep his bat as upright as possible.

The regular and full game of cricket is composed of twenty-two players, eleven in each party. Each party also selects an umpire, to whom all disputes are referred; who decide whether a player be out or not; and from whose judgment there is no appeal.

The wickets are pitched opposite to each other, upon the most level and advantageous ground, and twenty-two yards asunder. They must stand twenty-seven inches out of the ground, and the bails must be eight inches in length. In a line with the wickets, a mark is cut in the turf, three feet in length, which is termed the bowling crease; and at right angles with this is a short line, called the return crease. The bowler, in delivering his ball, is compelled to have one foot before, and the other behind this crease; and if he fail, it is the duty of the umpire at his wicket to call out—"No ball!" in which case, the batter may strike it, and obtain what advantage he can, and if he be bowled out, it is not reckoned. A good bowler is a most valuable member of the game, and one on whom success mainly depends. The ball must not weigh more than five ounces and three quarters, nor less than five ounces and a half.

The bat must not be wider than four inches and a half; its height, exclusive of the handle, should be twenty-one inches. There is no absolute law respecting the height of the bat; this, however, is found to be the most convenient.

The striker, or bats-man, is confined by a line, cut parallel with his wicket, and four feet distant from it. This line is termed the popping crease. If he transgress this boundary while the ball is in play, the wicket-keeper, or any other player holding the ball, is at liberty to put him out, by striking down his wicket with the ball. This, however, must always be done by means of the ball

itself; either by throwing it, or, if near enough, by keeping the ball in hand at the time of putting down the wicket.

The wicket-keeper holds likewise an important station in the game. He stands opposite to the bowler, and behind the wicket at which the striker is playing. The duties of the wicket-keeper are too various to be detailed in this work, which, of course, affects no more than to give an outline of the principle of the game.

Besides the bowler and wicket-keeper, who are the two most serviceable men in the field; there are the first short slip, who stands near to the wicket-keeper, consequently behind the wicket, yet diagonally in front of the batter.

The point directly faces the striker. His station is about seven yards from the popping-crease.

The middle-wicket stands on the off side, and about twenty-three yards from the striker's wicket.

The leg or hip has his appointment about sixteen yards from the popping-crease, behind the batter.

The long-stop is placed behind the wicket-keeper, to save the balls he may miss as they come from the bowler; for the batters may take the advantage of running when a ball has been over-thrown, or has not been stopped after the bowler has delivered it, although it may not have been struck.

The long slip stands in a line with the striker, and between the point and short slip, but farther out in the field.

A man to cover the middle-wicket and the point, stands on the off-side of the striker. It is his duty to save those balls that either of the above may have missed.

The long field on the off-side, stands between the middle wicket and the bowler, but at a considerable distance, to save the hard hits.

The long field on the on-side, is stationed at a great distance from the striker, and on the other side of the bowler from the man last mentioned.

After every four balls have been bowled, the umpire calls "Over!" when the whole party, who are seeking out, (with the exception, of course, of the bowler and wicket-keeper) change their positions to the opposite quarters of the field.

[*Note.*—The reader who may desire farther information respecting the laws of this game, with instructions to the young player, is referred to a little work entitled "The Young Cricketer's Tutor, by John Nyren, who was for many years a player in the celebrated old Hambledon Club."]

Crimp, *v.* To make several cuts across the spine of a fish when just taken out of the water, by which it is rendered firmer when produced at table.

Crimson, *s.* Red, somewhat darkened with blue; red in general.

Crinose, *a.* Hairy, full of hair.

Cripple, *v.* To lame, to make lame.

Croak, *v.* To make a hoarse low noise like a frog; to caw or cry as a raven or crow.

Crook, *s.* Any crooked or bent instrument; a sheep-hook; any thing bent.

Crop, *s.* The craw of a bird.

Crop, *v.* To cut off the ends of any thing; to mow; to cut off the ears.

Young dogs should not be cropped before the fourth and fifth week of their age: when the ears are cut earlier, they sprout again, and the form of the crop cannot be so well directed as when the ear is more developed.

In cropping terriers, begin at the hinder root of the ear, close to the head, and when this cut is carried through, one other cross cut from the root at the front of the head, if managed with dexterity, will be sufficient, and will make an excellent fox crop, without torturing the animal with numerous trimmings. The less oblique the second cut is carried, the more sharp and foxy will the crop prove: the portion cut off, if laid on the remaining ear, will serve to direct the operation in that also. A rounded crop may be made at one cut. The cropping of pug puppies is the most painful of any; the cuts must, in general, be repeated, and carried close to the root of the ear; as upon the total absence of external ears (which gives an appearance of roundness to the head) is the beauty of the animal *supposed* to consist.

Cropful, *a.* Satiated, with a full belly.

Cropsick, *a.* Sick with excess and debauchery.

Cropper, *s.* A kind of pigeon with a large crop.

Crossbill (*Loxia curvirostra*, Linn.), *s.*

This species weighs about an ounce and a half; length near six inches and a half; bill strong, both mandibles convex, and crossing each other at the points, which are hooked; colour brown; eyes small; irides dusky.

The plumage of the male varies from a beautiful red to orange-colour on the head, neck, breast, back, and rump; the wing coverts rufous brown; quills and tail dusky; vent almost white; under tail coverts spotted dusky; tail forked; legs short; claws strong.

The females also vary somewhat in colour. In general, they are of a dull olive-green on those parts where the male is red; but the feathers on the back are mottled with dusky; the wings and tail similar to that of the male, but not so dark. We have observed that the crossing of the mandibles is not constantly on the same side.

That rare bird, the crossbill, occasionally visits the orchards in our neighbourhood, coming in little parties to feed on the seeds of the apple, and, seldom as it appears, it is always noticed by the mischief it does to the fruit, cutting it asunder with its well constructed mandibles, in order to obtain the kernels. A native of those extensive pine forests in the neighbourhood of the Rhine, it makes excursions into various parts of Europe in search of change of food; and though several instances are recorded of its visits to our islands, I know but one mentioned of its having bred in England. A pair was brought to me very early in August, and the breast of the female being nearly bare of feathers, as is observed in sitting birds, it is very probable that she had a nest in the neighbourhood.—*Knapp—Montagu.*

Cross-bow, *s.* A missive weapon formed by placing a bow athwart a stock.

Cross-grained, *a.* Having the fibres transverse or irregular; perverse, vexatious.

Crottle, *s.* A lichen which grows principally on sand stone, used in dyeing hackles and wools.

The power of crottle can never be known but by length of boiling; for which reason, get the largest copper pot you can. It ought to hold thirty or forty quarts; then put three quarts of crottle in, and fill it with water. Separate the wool according to the number of shades you wish for, put it into as many bags, and let them boil *eight whole days*, or *as long as you can stay* out of bed. You may draw a bag every six hours, and if you wish lighter shades, sooner. You are to get a round thin deal board, (see there is no turpentine in it,) bore it with holes that will receive your fingers, put your lid over that, and be careful of keeping your pot full of water. After three days' boiling, you must put in two quarts more crottle, to bring up your dark shades. I followed this plan for a whole six days, and I got the finest colours my eyes ever saw. I got so high a shade as a rich claret brown under; and it was a very rich cinnamon over head. The reason I have mentioned eight days is on account of the bags, which prevent the dye. I also mention a copper pot, and you must use no other in any dye. I never could clean the crottle properly out of the fur for want of being in bags. Strong muslin bags will answer much better; particularly as by using them the operator may enjoy his bed *four nights* out of *the eight specified.*—*Ancient Recipe.*

Croup, *s.* The rump of a fowl; the buttocks of a horse.

Croupades, *s. obs.* Are higher leaps than those of curvets.

Crow, *s.* A large black bird that feeds upon the carcases of beasts; a piece of iron used as a lever; the voice of a cock, or the noise which he makes in his gaiety.

This species weighs about nineteen ounces; length eighteen inches; bill black; irides dusky. The whole plumage black, glossed above with a purplish blue; legs black.

Distinguished from the rook by the bill, which is rather more convex towards the end, and the nares, or reflected bristles, at the base being always perfect; but these are only obvious in adults. In young birds the note is the only criterion of distinction, which in this is much more hoarse than that of the rook.

The crow feeds on flesh, insects, and grain; but is particularly fond of carrion. It frequently attacks the eyes of dying animals, and destroys weakly lambs; it will also pursue birds on wing, when pressed by hunger. We once saw this bird in pursuit of a pigeon,

at which it made several pounces, like a hawk; but the pigeon escaped, by flying in at the door of a house. We have also seen it strike a pigeon dead from the top of a barn. It is a great destroyer of young game and poultry.

It is a bold bird, always at war with the lesser species of hawks; nor does the kite, the buzzard, or the raven, approach its nest without being attacked and driven away. At that season, even the peregrine falcon is insulted, who frequently at one pounce brings it to the ground.

The eggs are four or five in number, of a greenish colour, spotted with dusky and ash-colour, their weight about five drachms. Colonel Montagu observed two crows by the sea-shore, busy in removing small fish beyond the flux of the flowing tide, and depositing them just above high-water mark, under the broken rocks, after having satisfied the calls of hunger. This species, like the magpie, is extremely garrulous at the sight of a fox or other small quadrupeds, and attacks and makes prey of a half-grown hare. In a summer evening ramble, Colonel Montagu saw one of these birds make repeated pounces at some animal in a field where the grass was nearly a foot high, which appeared to raise itself on its hind legs, and defend itself stoutly; upon a nearer approach he discovered it to be a young hare.—*Rennie.*

Crownscab, *s.* A stinking filthy scab round a horse's hoof.

Crown Scab and Rat Tails are of the same nature as mallenders, and may be cured by the same means. They generally, however, leave a blemish, consisting in a loss of hair and thickening of the cuticle. Crown scab occurs on the coronet, and rat tails in lines on the back part of the leg, extending from the fetlock upwards.—*Vide* Mallenders.

Crude, *a.* Raw, not subdued by fire; not brought to perfection, immature.

Crupper, *s.* That part of the horse's furniture that reaches from the saddle to the tail.

Crural, *a.* Belonging to the leg.

Crust, *s.* Any shell, or external coat; an incrustation, collection of matter into a hard body; the outer hard part of bread.

Crustaceous, *a.* Shelly, with joints; not testaceous.

Cry, *v.* To utter an inarticulate voice, as an animal; to yelp, as a hound on a scent.

Cry, *s.* Yelping of dogs; yell, inarticulate noise; a pack of dogs.

Crystal, *s.* A clear transparent substance, like glass.

Crystal, *a.* Consisting of crystal; bright, clear, transparent, lucid.

Crystalline Humour, *s.* The second humour of the eye, that lies immediately next to the aqueous, behind the uvea.

Cub, *s.* The young of a beast, generally of a bear or fox.

Cub, *v. obs.* To bring forth.

Cub-hunting. The pursuit or chace of young foxes—dangerous for horses, and destructive to game.

Previous to the month of November no man who has any thing else to amuse himself with, or who has a regard for his neck, or his horse, should be seen by a covert's side, unless it be on a hack cub-hunting, which after all is but a melancholy recreation.

Cube, *s.* A regular small body, consisting of six square and equal faces or sides, and the angles all right, and therefore equal.

Cubebs, *s.* A very efficient pepper. It has been lately much used in medicine.

CUCKOO, *s.* A bird which appears in the spring, and is said to suck the eggs of other birds, and lay her own to be hatched in their place; a name of contempt.

Cuckoo, or *Gowk.*—(*Cuculus Canorus*, LINN.; *Le Coucou*, BUFF.)—Length fourteen inches, breadth twenty-five; its bill is black and somewhat bent; eyes yellow; inside of the mouth red; its head, neck, back, and wing coverts are of a pale blue, or dove colour, which is darkest on the head and back, and palest on the fore part of the neck and rump; its breast and belly are white, elegantly crossed with wavy bars of black; the quill feathers are dusky, their inner webs marked with large oval white spots; the tail is long; the two middle feathers are black, with white tips; the others dusky, marked with alternate spots of white on each side the shaft: the legs are short and of a yellow colour; toes two forward, and two backward; claws white.

The cuckoo visits us early in the spring; its well-known cry is generally heard about the middle of April, and ceases the latter end of June; its stay is short, the old cuckoos being said to quit this country early in July. Cuckoos build no nest; and, what is more extraordinary, the female deposits her solitary egg in the nest of another bird, by which it is hatched. The nest she chooses for this purpose is generally selected from the following, viz., the hedge sparrows, water wagtails, titlarks, yellow hammers, green linnets, or the winchats. Of these it has been observed that she shows a much greater partiality to that of the hedge sparrow than to any of the rest.—*Bewick.*

CUP, *v.* To draw blood by applying cupping glasses.

CUR, *s.* A worthless degenerate dog.

CURB, *s.* An iron chain, made fast to the upper part of the branches of the bridle, running over the beard of the horse; restraint.

Curb is an enlargement at the back of the hock, about three or four inches below the point of the hock. It is either a strain in the ring-like ligament which binds the tendons down in their place, or in the sheath of the tendons; oftener, we are inclined to think, of the ligament than of the sheath. Any sudden action of the limb of more than usual violence may produce it, and therefore horses are found to 'throw out curbs' after a hardly contested race, an extraordinary leap, a severe gallop over heavy ground, or a sudden check in the gallop. Young horses are particularly liable to it, and horses that are *cow-hocked* or whose hocks and legs resemble those of the cow, the hocks being turned inward, and the legs forming a considerable angle outwards. This is intelligible enough; for in hocks so formed, the

annular ligament must be continually on the stretch to confine the tendon.

Curbs are generally accompanied by considerable lameness at their first appearance, but the swelling is not always great; indeed, it sometimes presents so gradual a curve, that it is scarcely perceivable when we stand behind the horse, and both the horseman and the veterinary surgeon have overlooked it. It is best detected by observing the leg sideway.

The first object in attempting the cure is to abate inflammation, and this will be most readily accomplished by cold evaporating lotions, frequently applied to the part. Equal portions of spirit of wine, water, and vinegar, will afford an excellent application. It will be almost impossible to keep a bandage on. If the heat and lameness are considerable, it will be prudent to physic the horse, and to bleed from the subcutaneous vein. Whether the injury be of the annular ligament, or the sheath of the tendon, more active means will be necessary to perfect the cure. Either a liquid blister should be rubbed on the part, consisting of a vinous or turpentine tincture of cantharides, and this daily applied until some considerable swelling takes place, which should be allowed to subside, and then the liniment again resorted to; or, what is the preferable plan, the hair should be cut off, and the part blistered as soon as the heat has been subdued. The blister should be repeated until the horse goes sound, and the swelling has disappeared. In severe cases it may be necessary to fire, but we cannot recommend the indiscriminate recourse to the hot iron in every case of curb, and we would uniformly give a fair trial to milder measures. If the iron be used, the strokes should be in straight lines.

There are few complaints in which absolute and long continued rest is more requisite, than in curb. An injury so serious leaves the parts very materially weakened, and, if the horse be soon put to work again, the lameness will frequently return. No horse that has had curbs should be put even to ordinary work in less than a month after the apparent cure, and even then he should very gradually resume his former habits. A horse with a curb is manifestly unsound.

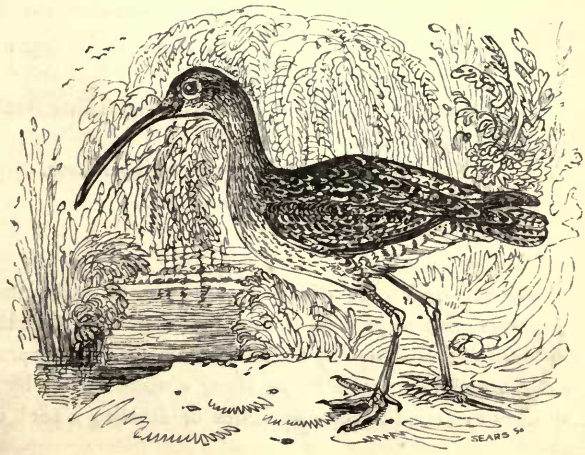
Curb, *v.* To guide a horse with a curb; to restrain; to check.

Curd, *s.* The coagulation of milk.

Cure, *s.* Remedy, restorative; act of healing.

Cure, *v.* To heal, to restore to health, to remedy.

Curlew, (*Scolopax arquata*, Linn.; *Le Courlis*, Buff.), *s.* A kind of waterfowl.



The bill is long, equally incurvated, and terminated in a blunt point; nostrils linear, and longitudinal near the base; tongue short and sharp-pointed; and the toes are connected as far as the first joint, by a membrane.

With the curlew, Linnæus begins a nume-

rous tribe of birds under the generic name of *scolopax*, which, in his arrangement, includes all the snipes and godwits, amounting, according to Latham, to forty-two species and eight varieties, spread over various parts of the world, but nowhere very numerous.

Buffon describes fifteen species and varieties of the curlew, and Latham ten, only two or three of which are British birds. They feed upon worms, which they pick up on the surface, or with their bills dig from the soft earth: on these they depend for their principal support; but they also devour the various kinds of insects which swarm in the mud, and in the wet boggy grounds, where these birds chiefly take up their abode.

The curlew generally measures about two feet in length, and from tip to tip above three feet. The bill is about seven inches long, of a regular curve, and tender substance at the point, which is blunt. The upper mandible is black, gradually softening into brown toward the base; the under one flesh-coloured. The head, neck, upper part of the back, and wing-coverts, are of a pale brown, the middle of each feather black, edged and deeply indented with pale rust colour, or light grey. The breast, belly, and lower part of the beak, are dull white, the latter thinly spotted with black, and the two former with oblong strokes more thickly set, of the same colour. The quill-feathers are black, the inner webs crossed or spotted with white; the tail is barred with black, on a white ground tinged with red; the legs are bare a little above the knees, of a blueish colour, and the toes are thick, and flat on the under side.

These birds differ much in size, as well as in the different shades of their plumage; some of them weighing not more than twenty-two ounces, and others as much as thirty-seven. In the plumage of some the white parts are much more distinct and clear than in others, which are more uniformly grey, and tinged with pale brown.

The female is so nearly like the male, that any particular description of her is unnecessary: she makes her nest upon the ground, in a dry tuft of rushes or grass, of such withered materials as are found near, and lays four eggs, of a greenish cast, spotted with brown.

The curlew is met with by travellers in most parts of Europe, from Iceland to the Mediterranean islands. In Britain their summer residence is upon the large heathy, boggy moors, where they breed. Their food consists of worms, flies, and insects, which they pick out of the soft mossy ground by the marshy pools, which are common in such places. In winter they depart to the sea-side, where they are seen in great numbers, and then live upon the worms, marine insects, and other fishy substances which they pick up on the beach and among the loose rocks and pools left by the retiring tide. The flesh of the curlew has been characterised by some as very good, and of a fine flavour—by others as directly the reverse; the truth is, that, while they are in health and season, and live on the moors, scarcely any bird can excel them in goodness; but when they have lived some time on the sea shore, they acquire a rank and fishy taste.—*Bewick.*

CURRICLE, *s.* An open two-wheeled chaise, made to be drawn by two horses abreast.

CURRY, *v.* To dress leather; to rub a horse with scratching instruments, so as to clean his coat.

CURRYCOMB, *s.* An iron instrument used for currying horses.

CURVE, *s.* Anything bent, a flexure or crookedness.

CURVE, *v.* To bend, to crook, to inflect.

CURVET, *v.* To leap, to bound.

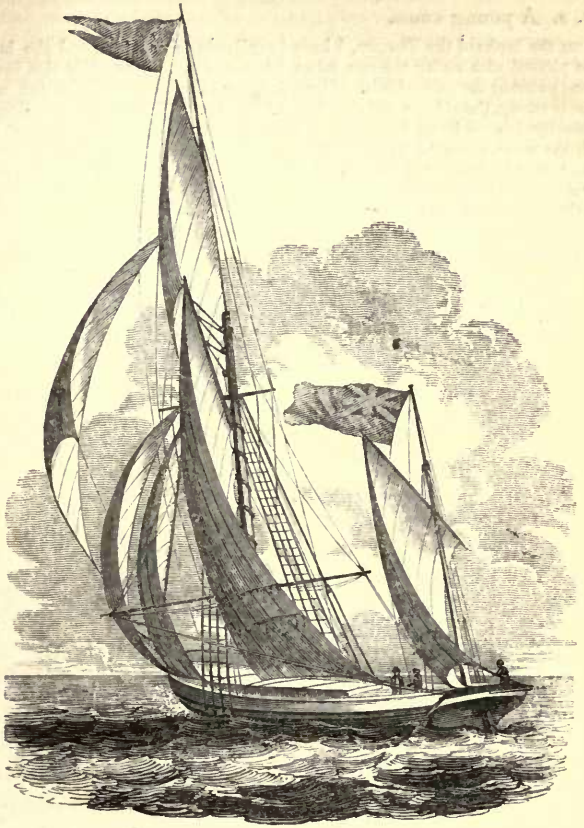
CUT, *v.* To penetrate with an edged instrument; to make its way by dividing obstructions; to perform the operation of cutting for the stone.

CUT, *s.* The action of a sharp or edged instrument; the impression or separation of continuity made by an edge; a wound made by cutting; a channel made by art; the act or practice of dividing a pack of cards; form, shape.

CUTANEOUS, *a.* Relating to the skin.

CUTICLE, *s.* The first and outermost covering of the body, commonly called the scarf-skin.

Cutter, *s.* An agent or instrument that cuts any thing; the teeth that cut the meat; a fore and aft-rigged vessel with one mast and a running boltsprit.



Cutters have been always favourite vessels, from their excellent sailing qualities, and, consequently, are much employed as revenue cruisers, smugglers, privateers, and packets, and in any trade requiring much despatch. A cutter under one hundred tons is sufficiently handy and manageable, but when the size increases to that of the larger yachts and cruisers, a very strong crew is necessary, as the spars are immensely heavy, and a number of men requisite to set or shorten sail.

A single-masted vessel is objectionable, because in the event of springing a spar, she becomes perfectly helpless; hence large cutters are only used in short voyages, or as coasting cruisers. Their peculiar qualities of beating well to windward, and working on short tacks, adapt them for channel cruising; and in case of accident, they can always manage to reach some harbour or anchorage where they can repair the damage they may have sustained.

Some years back, large cutters were confined principally to the navy and revenue, but the Royal Yacht Club have not only exceeded them in size, but also in beauty and sailing. Some of the finest and fastest cutters in the world are the property of this celebrated and truly national club; and two of them, the *Alarm* (Mr. Wild's), and the

Arundel (the Duke of Norfolk's), measure 193 and 188 tons.

The inconvenient size of a cutter's boom and mainsail has caused the introduction very generally of a ketch rig; which, by the addition of a mizen, enables the boom to be dispensed with, and reduces the mainsail considerably. This rig, when the mizen stands well, is very elegant, and, if a vessel is short-handed, exceedingly handy.—*Vide* Yacht.

Cygnet, *s.* A young swan.

Living on the banks of the Thames, I have often been pleased with seeing the care taken of the young swans by the parent birds. Where the stream is strong, the old one will sink herself sufficiently low to bring her back on a level with the water, when the cygnets will get upon it, and in this manner are conveyed to the other side of the river, or into stiller water. Each family of swans on the river has its own district; and if the limits of that district are encroached upon by other swans, a pursuit immediately takes place, and the intruders are driven away. Except in this instance, they appear to live in a state of the most perfect harmony. The male is very attentive to the female, assists in making the nest, and when a sudden rise of the river takes place, joins her with great assiduity in raising the nest sufficiently high to prevent the eggs being chilled by the action of the water, though sometimes its rise is so rapid, that the whole nest is washed away and destroyed.—*Jesse.*

Cygnetics, *s. obs.* The art of hunting.

Cyst, *s.* A bag containing some morbid matter.

DACE.

DAB, *s.* A kind of small flat fish.

DAB-CHICK, *s.* A water-fowl.

DACE, *s.* A small river-fish, resembling a roach.

Dace or Dare, is gregarious, is a great breeder, very lively, and during summer is fond of frolicking near the surface. Its head is small, the irides of a pale yellow; the body long and slender; its scales are smaller than those of the roach, and is upon the whole a handsomer fish; the back is varied with dusky, and a cast of yellowish green; the sides and belly silvery, the ventral, anal, and caudal fins are sometimes of a pale red hue; the tail is very much forked. The dace is seldom above ten inches long, although in a list of fish sold in the London markets, with the greatest weight of each, communicated to Mr. Pennant, there is an account of one that weighed a pound and half, and according to Linnæus, it grows to a foot and half in length.

The haunts of Dace are deep water, near piles of bridges, where the stream is gentle, over gravelly, sandy, and clayey bottoms; deep holes that are shaded, water-lily leaves, and under the foam caused by an eddy; in the warm months they are to be found in shoals on the shallows near to streams; the dace spawn in March, are in season about three weeks after; they improve, and are very good, about Michaelmas, but are best in February, and are said in that month, when just taken, scotched, and broiled, to be more palatable than a fresh herring.

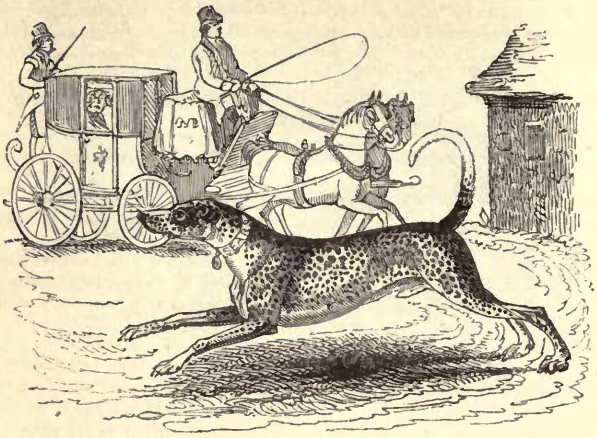
This is a fish affording great sport to the angler, indeed more pleasure than profit, for the flesh is insipid, and full of bones. The baits for dace are the red worm, brandling, gilt-tail, cow-dung, and earth-bob, and indeed any worm bred on trees or bushes, that is not too big for his mouth, and almost every kind of fly and caterpillar. Flesh flies upon the surface with the hook put into the back, between the wings, the line from the middle downwards of single hairs, and a trifle longer than the rod, which ought to be eighteen feet at least, and as light as possible; the flies can be kept in a phial; fix three very small hooks upon single hair links, not above four inches along the line, and in a summer's evening, at the smoothest part of the end of a mill-stream, from seven or eight, so long as light continues, the dace will yield diversion. In the same manner, they will rise in the morning at the ant-fly, if used at the foot of a current or mill-stream, or on a scour before the sun comes on the water.

After rains, when the river is nearly level

with its banks, use a caterpillar-fly, or a small red palmer and yellow-gentle (the yellower the better), run the hook through its skin, and draw it up to the tail of the fly, then whip on the surface, the dace will rise freely.

Another way to take this fish, from the middle of April until the beginning of October, is by artificial fly-fishing, with a long line.—*Daniel.*

DALMATIAN, (*Canis Dalmatianus*), *s.* The coach-dog.



This dog has been erroneously called the Danish dog by some authors, and Buffon, and some other naturalists, imagine him to be the harrier of Bengal; but his native country is Dalmatia, a mountainous district of European Turkey. He has been domesticated in Italy for upwards of two centuries, and is the common harrier of that country.

The Dalmatian is also used as a pointer, to which his natural propensity more inclines him than to be a dog of the chase; he is said to be easily broken, and to be very staunch. He is handsome in shape, something betwixt the British foxhound and English pointer; his head is more acute than that of the latter, and his ears fully longer: his general colour is white, and his whole body and legs are covered with small irregular sized black or reddish brown spots. He is much smaller than the large Danish dog. A singular opinion prevailed at one time in this country, that this beautiful dog was rendered more handsome by having his ears cropped: this barbarous fancy is now quickly dying away.

I have never heard of the Dalmatian being trained to the sports of the field in Great Britain. His only use seems to be an elegant attendant upon a carriage, for which the symmetry of his form and beauty of his skin peculiarly fit him. A most erroneous notion has prevailed among some breeders, that neither this nor the great Danish dog has the sense of smell. They have been indiscriminately called the coach-dog.—*Brown.*

DAM, *s.* The mother; a mole or bank to confine water.

DAMASCENE, *s.* *Vide* BARREL.

DAPPLE, *a.* Marked with various colours; variegated.

DAPPLE, *v.* To streak, to vary.

DAR, or DART, *s.* A fish found in the Severn.

DARE, *s.* *Vide* DACE. DARE, *v.* *To Dare Larks,* to catch them by means of a looking-glass.

DAW, *s.* A bird.

DEAL, *s.* The art or practice of dealing cards; fir-wood; the wood of pines.

DEALER, *s.* A person who deals the cards; one who buys and sells horses and dogs.

A gownsman of Cambridge, anxious to purchase a particular horse in the possession of Mr. Fordham, horse-dealer of that place, called upon him to make proposals, but disagreeing as to price, the collegian waited upon him several times to see if he could possibly bring him over to his terms.—In the interim, however, Mr. Fordham was taken dangerously ill and died. Next day, the gownsman, unacquainted with the circumstance of his death, called and asked a groom for his master.—"My master is dead, sir, (said one of the stable-boys) but he left word you should have the horse."—*Sporting Anecdotes.*

DECOCTION, *s.* The act of boiling any thing; a preparation made by boiling in water.

The vessel in which *decoctions* are made should be covered, and when the substance contains any aromatic or volatile principle, the boiling should be continued only a short time. Decoctions should be strained while hot, as some of them, Peruvian bark for example, deposit some active and useful matter in cooling. Decoctions soon ferment, and are spoiled by keeping; they should be used therefore soon after they are made.

* * *

A decoction of *marsh-mallows*, it is useful in fevers as a vehicle for nitre or other medicine; also as an emollient clyster and fomentation.

CAMOMILE.

Camomile flowers, dried . .	1 oz.
Caraway seeds, bruised . .	1½ oz.
Ginger, bruised	1½ oz.
Water	1 qt.

Boil for ten or fifteen minutes: a good stomachic drench.

OAK BARK.

Oak Bark, bruised . . .	2 oz.
Water	1 qt.

Boil gently for ten minutes; a good vehicle for tonic medicine.

DECOCTION FOR FOMENTATION

Is made by boiling bay leaves, camomile flowers, wormwood, and southernwood in a sufficient quantity of water.

BARLEY.

Barley water is made by boiling pearl barley in water. This may be used in fevers, either alone, or as a vehicle for nitre or other medicine. Various other decoctions are occasionally employed, and sometimes preferred on account of their cheapness, to more efficacious, but more expensive medicines; yet it must be recollected that some vegetables, such as peppermint, pennyroyal, &c. have their useful properties dissipated by much boiling, and should therefore be only simmered for a few minutes, or only infused.—*White.*

DECOY, *v.* To lure into a cage, to entrap.

The decoys now in use are formed by cutting pipes, or tapering ditches, widened and deepened as they approach the water; in various semicircular directions, through the swampy ground, into particular large pools, which are sheltered by surrounding trees or bushes, and situated commonly in the midst of the solitary marsh. At the narrow points of these ditches farthest from the pool, by which they are filled with water, the fowlers place their funnel nets: from these the ditch is covered by a continued arch of netting, supported by hoops, to the desired distance; and all along both sides, skreens formed of reeds are set up so as to prevent the possibility of the birds seeing the decoyman; and as these birds feed during the night, all is ready prepared for this sport in the evening. The fowler, then placed on the leeward side, sometimes with the help of his well-trained dog, but always by that of his better trained tame decoy ducks, begins the business of destruction. The latter, directed by his well known whistle, or excited forward by the floating hempseed, which he strews occasionally upon the water, entice all the wild ducks after them under the netting; and as soon as this is observed, the man or his dog, as the fitness of opportunity may direct, is from the rear exposed to the view of the birds, by which they are so alarmed that they dare not offer to return, and are prevented by the nets from escaping upwards: they therefore press forward in the utmost confusion to the end of the pipe, into the purse nets there prepared to receive them, while their treacherous guides remain behind in conscious security. The season allowed by act of parliament for catching these birds in this way, continues only from the latter end of October till February.

Particular spots or decoys, in the fen countries, are let to the fowlers at a rent of from five to thirty pounds per annum; and Pennant

instances a season in which thirty-one thousand two hundred ducks, including teals and widgeons, were sold in London only, from ten of these decoys near Wainfleet, in Lincolnshire. Formerly, according to Willoughby, the ducks, while in moult and unable to fly, were driven by men in boats, furnished with long poles, with which they splashed the water, between long nets, stretched vertically across the pools, in the shape of two sides of a triangle, into lesser nets placed at the point, and in this way, he says four thousand were taken at one driving in Deeping-fen; and Latham has quoted an instance of two thousand six hundred and forty-six being taken in two days, near Spalding in Lincolnshire; but this manner of catching them while in moult is now prohibited.

DECOY, *s.* Allurement to mischief.

DECOY-DUCK, *s.* A duck that lures others.

DEER, *s.* That class of animals which is hunted for venison. *Vide* FALLOW, RED, and ROE DEER.

DEGENERATE, *v.* To fall from its kind, to grow wild or base.

DEMULCENT, *a.* Softening, mollifying. DEMULCENTS, *s.* Medicines of an oily and mucilaginous nature, as lint and quince seed, gum, &c.

DEN, *s.* A cavern or hollow running horizontally; the cave of a wild beast.

DEOBSTRUENT, *s.* A medicine that has the power to resolve viscidities.

DESTROY, *v.* To kill; to put an end to.

It is not unfrequently a subject of inquiry, how it may be possible to destroy a dog with least pain to himself, and least shock to the feelings of his owner. Although shooting and hanging are not, in themselves, painful deaths, yet the violence necessarily committed is revolting to one's feelings. Whenever, therefore, cases arise (and many such do occur) where it would be infinitely more humane to destroy an animal than to prolong a miserable existence, and when the more usual modes are objected to on account of the violence and force necessary, either of these essential oils, *cherry laurel, and bitter almond*, dropped on the tongue, or a very small ball made from the extract, will extinguish life almost instantaneously, and without pain.—*Blaine.*

DETERGE, *v.* To cleanse a sore. *Vide* CAUSTICS.

DETONATION, *s.* A noise somewhat more forcible than the ordinary crackling of salts in calcination, as in the going off of the pulvis or aurum fulminans. *Vide* PERCUSSION.

DETONATING POWDER, *s.* A chemical composition by which percussion-guns are discharged.

One of the recipes for making detonating powder is:—

One ounce of oxymuriate of potash,
One eighth of an ounce of superfine charcoal.
One sixteenth of an ounce of sulphur.

Mixed with gum-arabic water, and then dried. It should be mixed up in wood, for fear of accident.

Another, and, I am told, a far better proportion, is:—

Five of oxymuriate, Two of sulphur; and
One of charcoal.

I merely give the recipe, in case a sportsman should be in a place where he cannot buy the composition, as I presume, that no one in his senses would run the risk of being blown up, in order to make, perhaps indifferently, what he could so cheaply purchase in perfection.—*Hawker.*

We entirely agree with the colonel—and caution insurance companies against gentlemen who would attempt a home manufacture.

DIABETES, *s.* A morbid copiousness of urine.

Diabetes consists in an excessive discharge of urine, attended with great thirst, and sometimes with a gradual loss of flesh and great debility. The urine is sometimes limpid and transparent like water; at others high coloured, and of a very offensive smell. In slight or recent cases of diabetes a cure may generally be accomplished by the following ball, provided the cause is removed, which is generally new hay, new oats, musty hay or oats, or some other

unwholesome provender. But in the confirmed diabetes, when the urine has become stinking and high coloured, the cure is more difficult. Rest, or voluntary exercise only, and a light nutritious diet, are necessary.

BALL FOR DIABETES.

No. 1. Opium . from ½ to 1 dr.
Ginger . . . 2 dr.
Gentian-root powder 3 or 4 dr.
Oil of caraways . 20 or 30 drops.
Syrup enough to form the ball.

To be given morning and evening for two or three days, and should the disease then continue, give the following:—

No. 2. Sulphate of copper . 1 dr.
Ginger . . . 1 dr.
Linseed powder and syrup enough to form the ball.

To be given every morning and evening until the disease is cured.

Sulphate of copper has been found an excellent tonic in horses. I have also found the following a good tonic ball:—

No. 3. Sulphate of iron . 2 to 3 or 4 dr.
Powdered ginger . . 1 dr.
Powdered Gentian . 3 to 4 dr.
Treacle enough to form the ball.

I have seen an increased discharge of urine brought on in draught horses by working them beyond their strength; this has been attended with great weakness, especially of the hind parts, and loss of appetite. I have found great benefit in such cases from turning the horse to grass, and letting him remain there for some time, giving him a little *good* hay, or some oats, when it appears necessary.—*White.*

DIACHYLON, *s.* An ingredient in sticking plaster.

Diachylon (litharge or lead plaster) is made by boiling olive oil nine parts, litharge five parts, water two parts, over a slow fire, and constantly stirring, until the oil and the litharge unite, and acquire the consistence of plaster. The water must be replaced as it evaporates. Diachylon is an ingredient in sticking plaster and charges, and is useful when spread on leather, for defending a tender part from pressure.

DIAPENTE, *s.* A compound powder, tonic and stomachic.

DIAPHORETIC, *a.* Sudorific, promoting perspiration. The most useful sudorifics in veterinary practice, are hot stimulants, combined with antimony and opium.

DICE, *s.* The plural of die.

DICE-BOX, *s.* The box from which the dice are thrown.

DICER, *s.* A player at dice, a gamester.

DIDAPPER, *s.* A small bird of the diver kind.

DIE, *v.* To tinge, to colour.

DIE, *s.* Colour, tincture, stain, hue acquired; a small cube, marked on its faces with numbers from one to six, which gamesters throw in play; hazard, chance; any cubic body.

Recipes for Dyeing Hair.—(Dark water colour.)—Take a pint of strong ale, half a pound of soot, a small quantity of the juice of walnut leaves, and an equal quantity of alum powdered fine; mix them well, and boil them in a pipkin half an hour; when the mixture is cold, put in the hair, and let it remain ten or twelve hours.

* * *

Some boil a quarter of a pound of soot in a pint of strong alum water, with a little juice of walnut leaves, for half an hour, and steep the hair in it when nearly cold.

* * *

For a *brown*, take some powdered alum, boil it well until dissolved; then add a pound of walnut-tree bark, from the branches when the sap is up, or the buds or green nuts; boil it in an hour, and let it stand. When after skimming it for ten minutes, put in the gut or hair for about a minute (stirring it round), or until you like the colour. If it continues too long, it will become quite dark and injure the hair. The lighter it is tinged with this colour, the better. Salt and ale will also give hair a brownish cast that is steeped in it.

* * *

For a blueish water colour, proceed as above; only add logwood instead of the walnut, and be careful not to colour it too much.

* * *

Yellow.—The inner bark of a crab-tree boiled in water with some alum, makes a fine

yellow, which is excellent when the weeds rot, the line appearing of the same hue. Another dye may be obtained from two quarts of small ale, and three handfuls of walnut leaves bruised therein; the hair to remain in it until tinged to your wish.

* * *

Tawny is prepared from lime and water mixed together, by steeping hair in it for four or five hours, and then soaking it a whole day in a tan pit.

* * *

Russet.—Take a pint of strong lye, half a pound of soot, some juice of walnut leaves, and a quart of alum water; put them together into a pan, boil them well, and when the liquor is cold, steep the hair until it acquires the colour you desire.

* * *

General Remark.—The hair to be dyed, should always be the best white: the seasons for using dyed hair, are, September and two following months; the yellow, russet all the winter, and until the end of April, as well in rivers as in lakes; for the same periods, the brown and tawny should be used in blackish, heathy, and moorish waters.

Dyeing or Staining Fishing-rods.—Red is done by boiling the wood in water and alum; then taking it out, adding Brazil to the liquor, and giving the wood another boil in it. Black, by brushing it over with logwood, boiled in vinegar, then washing it over with a decoction of galls and copperas, till it be of the hue required. Any other colour may be given by squeezing out the moisture of horse-dung through a sieve, mixing it with dissolved roch alum and gum arabic, and to the whole adding green, blue, or any other colour designed. After standing two or three days, pear-tree or other wood cut to the thickness of half-a-crown is put into the liquor boiling hot, and suffered to remain till it be sufficiently coloured.

In Dyeing Bone, Horn, or Ivory.—Black is performed by steeping brass in aqua fortis till it be turned green; with this, the bone, &c., &c., is to be washed once or twice, and then put in a warm decoction of logwood and water. Green, is verdigris, sal ammoniac, and white wine vinegar; keeping the material therein till sufficiently green. Red is began by boiling it in alum water, and finished by a decoction in a liquor compounded of quick-lime steeped in rain-water strained. To every pint an ounce of Brazil wood is added: the bone to be boiled therein till sufficiently red.—*Ancient Recipes.*

DIET, *s.* Food, victuals; food regulated by the rules of medicine.

DIG, *v.* To work with a spade.

Digging Foxes.—With respect to the digging of foxes which hounds run to ground, if the hole be straight and earth slight, follow it, and in following the hole, by keeping below its level, it cannot be lost.—*Beckford.*

DIGEST, *v.* To generate matter as a wound.

DIGESTION, *s.* The act of concocting food; the preparation of matter by a chemical heat; the act of disposing a wound to generate matter.

DIGESTIVES, *s.* Medicines which promote suppuration in ulcers, and cause them to discharge a white healthy matter.

DIGESTIVE OINTMENT.

1. Hog's lard and strained turpentine, of each . 4 oz.
   Verdigris . . 1 oz.—Mix.
2. Hog's lard and Venice turpentine, of each . 4 oz.
   Sulphate of copper (blue vitriol), finely powdered 1 oz.—Mix.
3. Ointment of yellow rosin . 4 oz.
   Oil of turpentine . 1 oz.
   Nitric oxide of mercury (red precipitate), finely powdered . . 1 oz.—Mix.
4. Ointment of nitrated quicksilver . . 4 oz.
   Oil of turpentine . 1 oz.—Mix.
   —*White.*

DISEASE, *s.* Distemper, malady, sickness.

DISLOCATE, *v.* To put out of the proper place; to put out of joint; to displace a bone.

DISMOUNT, *v.* To throw any one from on horseback; to alight from a horse.

DISPENSATORY, *s.* A book in which the composition of medicines is described and directed; a pharmacopœia.

DISTEMPER, *s.* A disease, a malady.

The Distemper.—No disorder is more general or so destructive as that known by the name of the distemper; it is the most fatal (the plague only excepted) that any animal is subject to.

The symptoms of the distemper are not invariably similar, although there are predominant ones which always occur. It generally comes on with a dry husky cough, dullness and want of appetite, a running from the nose and eyes, and loss of flesh. As the disease advances, the dog appears much emaciated, and grows excessively weak, particularly in the loins and hinder extremities; usually there is convulsive twitchings of different parts, most commonly of the head, attended with dimness of sight; when the disease proceeds, and takes on its more virulent form, then the twitches degenerate into continued convulsive fits, the dog foams at the mouth, runs round, and expresses great pain, has a constant disposition to dung, with obstinate costiveness or incessant purging. There is likewise great irritability of the stomach, every thing being thrown up immediately it is taken in, and the animal dies, generally, in one of the spasmodic fits. From this state of the disease hardly any dog recovers, unless from the powerful effect of this gentleman's medicine, and even then he admits its success doubtful, although he insists, with the medicine early given, the disease will never arrive to this height; but, with every deference to the efficacy of the above medicine, the compiler has known Dr. James's powder cure the most inveterate stages of the disorder: the method of administering it will be hereafter directed. In every part of this disease a want of nervous energy, and a particular paralytic affection of the nerves, is apparent, and, in some instances, remains long after every other symptom has ceased, and in many respects is not unlike the palsy of the human frame.

The distemper, when existing in its worst form, is very often mistaken for canine madness; but a close attention to the following points will with certainty show the difference. Puppies are not so liable to madness as full-grown dogs; it is but seldom the animal will drink freely in the distemper, never in madness—yet they will now and then try to drink; the hydrophobia arrives likewise at its height, in general, sooner than the distemper, although the latter is sometimes equally sudden in its attack, and rapid in its progress. In madness, all recollection of places or persons is lost by the affected animal; his home will be left, and he will bite the hand that feeds him, indiscriminately with any other. In the distemper, there is no loss of reason but in the attack and actual continuance of the convulsion fits; the animal does not attempt to bite or rove abroad, and, on recovery from the fit, resumes his faculties. If, therefore, a young dog will drink when the immediate effect of the spasmodic restriction is removed, or, without evident fear, will bear the sight of water, but more particularly when his weakness is excessive, and strongly apparent between the intervals of the fits, it may be safely concluded that it is the distemper, and not madness. These circumstances, continues Mr. Blaine, should be carefully remarked, as they are unerring, and may save many a valuable animal from destruction, and many a timid mind from the most dreadful apprehension.

* * *

For the distemper, so soon as the symptoms appear, give an ounce of castor oil, and after its operation has ceased, give the following powder, mixed up with butter, into a bolus, every two hours, keeping the dog warm, and supplying him frequently with warm milk or water-gruel. Should the medicine occasion sickness or purging, the quantity and frequency of the doses are to be abated.

Crocus metallorum finely levigated, and white antimonial powder, each six grains, and diaphoretic calx of antimony, ten grains for one dose.

It is necessary to remark, that the above dose is sufficient for a pointer or fox-hound, of six or eight months old, and that the quantity is to be varied according to the size and age of the dog.

Rhubarb and jalap mixed, as much as will lie on a shilling, is an excellent common physic. For dogs, foul within, five grains of tartar emetic, given in a piece of hog's lard. For a surfeit, one ounce of sulphur, half an ounce of antimony, mixed together; a small ball in butter, to be given to the dog, and the sore place well rubbed with a mixture of white hellebore-root powdered, and hog's lard; the dog to be kept from water if he licks the ointment.

* * * * *

Doctor Darwin has given the following opinion upon the disorder, and how to counteract its malignity.

"In dogs, the catarrh is generally joined with symptoms of debility early in the disease; the animals should be permitted to go

about in the open air, the use of being as much as may be in the air, is evident, because all the air which they breathe, passes twice over the putrid sloughs of the mortified parts of the membrane, which lines the nostrils, and the maxillary and frontal cavities; that is, during inspiration and expiration, and must, therefore, be loaded with contagious particles.

Fresh new milk, and fresh broth, should be given them very frequently, and they should be suffered to go amongst the grass, which they sometimes eat for the purpose of an emetic; and, if possible, they should have access to a running stream of water, as the contagious mucus of the nostrils generally drops into the water they attempt to drink.

Bits of raw flesh, if the dog will eat them, are preferred to cooked meat, and from five to ten drops of tincture of opium (according to the size of the dog), may be given with advantage when symptoms of debility are evident, every six hours. If sloughs can be seen in the nostrils, they should be moistened twice a day with a solution of sugar of lead, or of alum, by means of a sponge fixed on a bit of whalebone, or by a syringe. The lotion may be made by dissolving half an ounce of sugar of lead, or of alum, in a pint of water." * *

The following remedies have their advocates, and, consequently, in some cases of the disorder have been proved essential in its cure.

One grain and a half of calomel, and five grains of rhubarb, to be repeated every other day.

Four grains of Turbith's mineral, and one grain of emetic tartar; first bleeding the dog.

A tea-spoonful of jalap, half the quantity of grated ginger, a table-spoonful of syrup of buckthorn, made into a ball, or given liquid in warm water. No milk, but water-gruel to drink, and the dog must be kept very warm.

Gamboge, dragon's-blood, jesuit's-bark, of each half an ounce, made into pills the size of a hazel nut. To a full grown dog, one pill to be given every morning until cured; to a whelp, three times a week, the dogs to have liberty to run out.

* * * *

Some rely entirely on purgatives: others bleeding and physicking; others on emetics; some put tar upon the nose, others a pitch plaster, and some cauterize the nasals; some inject vinegar into the dose, others hellebore, and others a solution of camphor; some cut off the tail, others the ears; some give tobacco and olive oil, others the golden sulphuret of antimony; the keeper gives the curpeth's mineral: the more scientific of these gentry will knock down the disease, and the dog too with arsenic. The gentleman will give compound tincture of benzoin, the farmer common salt; the medical man sulphuric ether, or emetics and sulphur, or emetics and jalap, or emetics and scammony.—*Youatt—Daniel—Darwin.*

Ditch, *s.* A trench cut in the ground usually between two fields; any long narrow receptacle of water.

Diver, *s.* A bird; one that sinks voluntarily under water; one that goes under water to search for any thing.

Diuretics, *s.* Medicines that excite and increase urinal discharge.

DIURETIC POWDER.

Powdered rosin and nitre, of each, 4 drs.

Mix for one dose, and let it be repeated daily, or twice a day, if necessary, until a sufficient effect is produced.

DIURETIC BALL.

Hard soap and common turpentine, of each, 4 drachms.

Powdered caraway seeds enough to form the ball. Mix for one dose.

CORDIAL DIURETIC BALL.

Hard soap and common turpentine, of each . . . . . 4 dr.
Ginger . . . . . 1 dr.
Opium . . . . . ½ dr.

Powdered caraways enough to form the ball. Diuretics should not be kept to become hard, as they often are, but be given in rather a soft state, and recently made. Diuretics should never be so given as to operate while a horse is in work, as he may thereby be prevented from staling when he has occasion; from neglecting this precaution, and from their frequent and immoderate use, arise those mischievous effects before alluded to. The kidneys are often materially injured by them as well as the bladder.—*White.*

Diuretic, *a.* Having the power to provoke urine.

Dock, *s.* The stump of the tail which remains after docking; a place where water is let in or out at pleasure, where ships are built or laid up.

Dock, *v.* To cut off a tail; to cut any thing short.

Dog, *s.* A domestic animal remarkably various in its species.

In ancient manuscripts we find the following names for the dogs employed in the sports of the field; that is to say, raches, or hounds; running hounds or harriers, to chase hares; and greyhounds, which were favourite dogs with the sportsmen; alauntes, or bull-dogs, these were chiefly used for hunting the boar; the mastiff is also said to be "a good hounde" for hunting the wild boar; the spaniel was of use in hawking; "hys crafte," says the author, "is for the perdrich or partridge, and the quaile; and, when taught to couch, he is very serviceable to the fowlers, who take those birds with nets." There must, I presume, have been a vast number of other kinds of dogs known in England at this period; these, however, are all that the early writers, upon the subject of hunting, have thought proper to enumerate. In the sixteenth century the list is enlarged; besides those already named, we find bastards and mongrels, lemors, kenets, terrours, butcher's hounds, dunghill dogs, trindel-tail'd dogs, "pryckeared" curs, and ladies' small puppies.

There formerly existed a very cruel law, which subjected all the dogs that were found in the royal chases and forests, excepting such as belonged to privileged persons, to be maimed by having the left claw cut from their feet, unless they were redeemed by a fine; this law probably originated with the Normans, and certainly was in force in the reign of Henry I.

* * *

Linnæus, in his System of Nature, has placed the dog as the second genus of the third order of mammiferous animals, or those which suckle their young by means of lactiferous teats.

The characters of the third order, Feræ, are as follows:—The fore teeth are conic, usually six in each jaw; the *tusks* are longer, the *grinders* have conic projections; the feet have claws, which are usually subulate, or awl-shaped; they feed on carcasses, and prey on other animals.

The characters of the genus Canis, or Dog, are, six cutting teeth in the upper jaw; those at the sides longer than the intermediate ones, which are lobated. In the under jaw there are also six cutting teeth, the lateral ones lobated; there are four canine teeth, one on each side, both above and below, and from six to seven grinders. The specific characters of the *Canis Familiaris*, or common dog, are, the head is carinated, or keel-shaped on the crown, the lower lip is hid by the upper, indentated and naked at the sides; the tongue is smooth; on the upper lip are five or six rows of whiskers; the nostrils are turned outwards into a crescent-shaped furrow; the upper margin of the ears is reflected and posteriorly doubled; the anterior margin is three-lobed, and there are seven or eight hairy warts on the face. There are ten teats, four of them pectoral, and six abdominal; the feet are subpalmated, with claws on the toes, which are long, a little curved, and not retractile within the toes, as is the case with those of the cat.

He has, besides the above anatomical distinctions, other general characters which are peculiar to his tribe.

He delights in associating with man, feeds on flesh, carcasses, and farinaceous vegetables, digests bones, is vomited by eating grass, which he does instinctively; drinks by lapping, runs obliquely, resting upon his toes; perspires by his tongue, which he lolls out when warm; when lying down turns often round; hears in his sleep, and dreams frequently. Of all animals the most faithful; fawns at the appearance of his master, and defends him; runs before him in a journey, and if the road divides, looks back and generally waits to see which he takes: will turn to the branch to which he is directed from a distance; his sense of smell is exquisite.

Cuvier, in his Animal Kingdom, gives the following generic character of the dog, which differs but little from that of Linnæus, except in his new and more distinct terminology.

The upper cheek teeth are six on each side, the three first are sharp, trenchant, called by Cuvier *false molars;* the following, a carnivorous tooth, has two cutting lobes, beyond which, on each side, are two flat teeth. In the lower jaw there are seven; four false molars, a carnivorous tooth, has two cutting lobes, beyond which, on each side, are two flat teeth, and two tuberculous teeth behind it. The length of the jaws and muzzle vary greatly; the tongue is smooth; the ears are extremely variable; there are five toes on the fore-feet, and four on those behind, furnished with longish nails, obtuse, and not retractile, and the mammæ are ventral; the eye-pupils are circular and diurnal, or formed for seeing by day.

* * *

Dogs exempt from Duty.—Whelps which are not six months old at the time of returning your list for taxes. Dogs belonging to any of the royal family, who are exempt from all duties on sporting. Poor persons, who are not assessed for dwelling-houses, may keep one dog, provided it be not a sporting dog.

SYNOPSIS OF BRITISH DOGS.

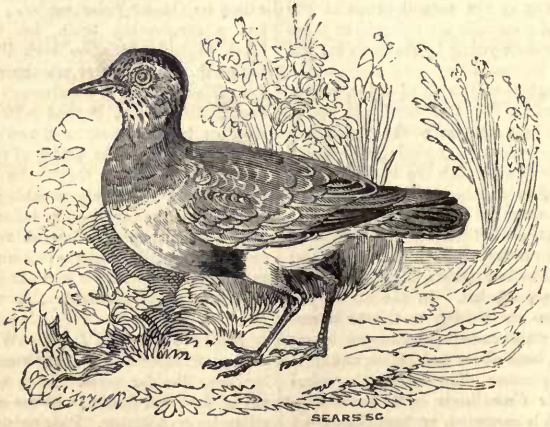
1. The most general kinds.	Dogs of Chase.	Hounds which hunt in packs.	Terrier.
			Harrier.
			Foxhound,
			Bloodhound.
		Hounds which hunt singly.	Irish Greyhounds.
			Gazehound.
			Greyhound.
			Leviner, or Lyemmer.
			Tumbler.
	Fowlers.		Spaniel, or Springer.
			Setter.
			Large Water Spaniel, or Finder.
	Lap Dogs.		Spanish Gentle, or Comforter.
2. Farm Dogs.	Watch Dogs.		Shepherd's Dog.
			Mastiff.
			Bull Dog.
3. Mongrels.	Mongrels.		Wrappe.
			Turnspit.
			Dancer.

Although it is said by naturalists that there are only thirty-seven varieties of the dog, yet the fact is, that almost every nation on earth intertropical, temperate, and polar, has its own peculiar variety.—*Brown.*—*Daniel.*—*Cuvier.*

DORMOUSE, *s.* A small animal which passes a part of the winter in sleep.

DOSSIL, *s.* A pledget, a nodule or lump of lint.

DOTTREL, (*Charadrius morinellus*, LINN.; *Le Guignard*, BUFF.) *s.* The name of a bird.



The length of this bird is about nine inches. Its bill is black; eyes dark, large, and full; its forehead is mottled with brown and white top of the head black; over each eye an

arched line of white passes to the hinder part of the neck; the cheeks and throat are white; the back and wings are of a light brown, inclining to olive, each feather margined with pale rust colour; the quills are brown. The forepart of the neck is surrounded by a broad band of a light olive colour, bordered on the under side with white. The breast is of a pale dull orange; middle of the belly black; the rest of the belly, thighs, and vent, are of a reddish white; the tail is of an olive brown, black near the end, and tipped with white, the outer feathers are margined with white. The legs are of a dark olive colour.

The dotterel is common in various parts of Great Britain, though in some places it is scarcely known. They are supposed to breed in the mountains of Cumberland and Westmoreland, where they are sometimes seen in the month of May, during the breeding season; they likewise breed on several of the Highland hills. They are very common in Cambridgeshire, Lincolnshire, and Derbyshire, appearing in small flocks on the heaths and moors of those counties during the months of May and June, and are then very fat, and much esteemed for the table. It is said that the dotterel is so very stupid a bird, as to be taken with the most simple artifice, and that it was formerly the custom to decoy them into the net by stretching out a leg or an arm which caught the attention of the birds, so that they returned it by a similar motion of a leg or a wing, and were not aware till the net dropped and covered the whole flock. At present the more sure method of the gun has superseded this artifice.

* * *

The Ring Dotterell.—(*Ring Plover*, or *Sea Lark; Charadrius Heaticula*, Linn.; *Le Petit Pluvier a collier*, Buff.)—The length is rather more than seven inches. The bill is of an orange colour, tipped with black; the eyes are dark hazel; a black hue passes from the bill, underneath each eye, and spreads over the cheeks; above this a line of white extends across the forehead to the eyes; this is bounded above by a black fillet across the head; a gorget of black encircles the neck, very broad on the forepart, but growing narrow behind, above which, to the chin, is white; the top of the head is of a light brown ash-colour, as are also the back, scapulars, and coverts; the greater coverts are tipped with white; the breast and the under parts are white; the quills are dusky, with an oval white spot about the middle of each feather, which forms, when the wings are closed, a stroke of white down each; the tail is of a dark brown, tipped with white, the two outer feathers almost white; the legs are of an orange colour; claws black. In the female the white on the forehead is much less; there is more white on the wings, and the plumage inclines more to ash-colour.

These birds are common in all the northern counties; they migrate into Britain in the spring, and depart in autumn: they frequent the sea-shores during summer, and run nimbly along the sands, sometimes taking short flights, accompanied with loud twitterings, then alight and run again; if disturbed, they fly right off. They are said to make no nest: the female lays four eggs, of a pale ash-colour, spotted with black, which she deposits on the ground.—*Bewick.*

Doughadoo, *s.* A colour used by fly-tiers on the Shannon.

Drag, *v.* To pull along the ground by main force; an artificial mode of hunting by substituting some strong smell in place of the animal scent.

Drag, *s.* An instrument with hooks to catch hold of things under water; a kind of car drawn by the hand.

Drag-net, *s.* A net which is drawn along the bottom of the water.

In making a drag-net, the size of the mesh should never be less than one inch and a quarter; there should be an extent of three times in length, and twice in depth of the plain net, before it is hung upon the cork and lead lines (that is, if the drag is meant to be twenty yards long, and twelve feet deep, there must be sixty yards of net in length, and twenty-four feet in depth for a sheet-drag; if made with a cod, it must be let in with great care as to the widenings, so that in fishing, it keeps a proper open centre). As drag-nets are usually hung, any one who is in the water when they are used, will feel, when the lines are hauled, the lead-line above the calf of his leg, and frequently above his knee, and that continued to very near the bosom of the net. There is no occasion to remark upon the chance of success such an implement affords.

Always use two, if not three flews with the drag: one or two flews can then be kept forward for the drag to force to, and in fishing every hole, back the drag with a flew; that is, after the drag approaches close to the first flew, of course that will be pulled on one or other side of the river. If any fish are in it they should be taken out, and so soon as the drag-net has passed, let the flew be pulled back into its former station; the fish that are

disturbed by the drag (from the different manner in which their lead-lines have been shown to keep a regular sweep at the bottom), soon perceive an opening to escape beneath it, and in striking to their old harbours, run head-long into the back flew; the discolouring of the water, from the trampling of the people in, together with the motion of some part of the drag upon the mud, all contribute to the success of this expedient, by which the best fish will always be captured.

A drag-net should always be used up the stream; however low the water in a river may be drained for the convenience of those fishing in it, there will still be a current sufficient to preserve the water clear enough for stumps and hangs of various descriptions to be avoided, besides the drain of the water keeps the meshes of the net extended, and enables it to fish with every advantage; on the contrary, when drawing down the stream, the mudding of the water progressively prevents the discovery of stubs, &c., that would injure the net, and aid the escape of the fish, and, moreover, drives the net into folds, which the leaves of the weeds turning the same way, not a little assist.—*Daniel.*

Drake, *s.* The male of the duck.

Dram, *s.* In weight the eighth part of an ounce; a small quantity; such a quantity of distilled spirits as is usually drank at once; spirits, distilled liquors.

Drastics, *s.* Violent purgatives.

Draught, *s.* The act of drinking; a quantity of liquor drank at once; the act of drawing or pulling carriages; the act of sweeping with a net; the quantity of fishes taken by once drawing the net; the depth which a vessel draws, or sinks into the water; a bill drawn for the payment of money.

Draughting.—This fishing is confined to the estuary, where the river meets the sea. Here, according to naturalists, the salmon undergo a probationary course, before they exchange the salt for the fresh water, as a sudden change from either would be fatal to the fish, and a temporary sojourn in water of an intermediate quality (brackish), is supposed to be requisite, before they can leave either the ocean or the river.

The draughting is carried on at the last quarter of the ebb, and during the first of the flood; five or six boats, with as many men in each, are necessary. When the salmon are seen, the nearest boat starts off, leaving a man on shore, with a rope attached to one extremity of the net, which is rapidly thrown over, as the boat makes an extensive circle round the place where the fish are supposed to lie. Returning to the shore, the curve of the net is gradually decreased. Stones are flung in at each extremity, to prevent the salmon from escaping; the net reaches the bank, the semicircle is complete, and all within effectually secured. The fish are then carefully landed, and at a single draught five hundred salmon have been taken. This is, however, an event of rare occurrence, and unless the net were powerfully strong, and the fishers skilful, a fracture, and consequently a general escape, would be inevitable.

* * * *

It is extraordinary how much the flavour and quality of the salmon depends on circumstances apparently of trifling moment. A single day in the river will injure, and a flood spoil their condition; and a difference between a fish taken in the nets, and one killed with a rod, will be easily perceptible.—*Wild Sports.*

Drayhorse, *s.* A horse which draws a dray.

Dredge, *s.* A kind of net; the iron and bag net with which oysters, scallops, &c., are lifted.

Dredge, *v.* To gather with a dredge.

Dredger, *s.* One who fishes with a dredge.

Drench, *v.* To saturate with drink or moisture; to physic by violence.

Though an inconvenient method of giving medicine to horses, it is preferable, on some occasions, on account of the medicine acting in much *less* time than in a solid form. In

flatulent colic, or gripes, where the symptoms are alarming, a proper drench will relieve the animal, while a ball would be useless.

The best instrument for giving drenches is the horn of an ox; the opening being cut obliquely, in the form of a spout. Bottles are sometimes used, on an emergency, to give drenches; but they are attended with danger, and should be handled cautiously. In giving a drench, the horse's tongue should be held with the left hand; and when the head is sufficiently elevated, the medicine is to be carefully poured into the throat, immediately letting go the tongue, while the head is kept up until the drench is swallowed. Drenches are very seldom given with dexterity, and a great part of the medicine is sometimes wasted. Every groom should learn to give them with facility, and always keep a proper instrument in the stable. In giving a drench, the head should not be kept so high as it generally is, nor should the throat be pressed or rubbed, as it often is, with a view to make the horse swallow, as it is apt to excite coughing. In severe colds or strangles, there is often some degree of soreness or inflammation of the throat, by which swallowing is rendered difficult and painful. In such cases no attempt should be made to give either a drench or a ball, as the complaint would be increased by it; and if at any time a horse happens to cough or appear distressed, while taking a drench, his head should be immediately let down. Hot stimulating medicines, or such as are very nauseous, are better given in the form of balls than drenches. Drenches should always be given with as much gentleness as possible; the horn may generally be introduced with ease, merely by pressing down the tongue with the fingers of the left hand, instead of dragging it out, as is commonly done. A small quantity only of the liquid should be given at once; about six or eight ounces, or even less, when tincture of opium or any powerful medicine is given; and it is of importance to be accurate in the dose, and not to give either more or less than a certain quantity.

In locked-jaw it is very difficult to give a drench, unless a small horn is kept for the purpose, and even then a good deal of dexterity and perseverance are often required to effect it. In some cases the jaws are so completely closed, and the muscles of deglutition so affected, that a drench cannot be given; and then the only method of conveying the medicine into the body is in the form of clyster. (*See* Clyster.)—*White.*

Drench, *s.* Physic for a brute; physic that must be given by violence.

Dress, *s.* Clothes, garments.

We all know that a jean, nankeen, or any kind of thin jacket, is the pleasantest wear for September, one of fustian for October, and one of velveteen for the winter; and that, for a man, who at all times uses but one kind of jacket, fustian would be about the medium. After having tried almost every thing that is commonly used, and some of the wretched articles that are puffed by advertisement, I have found nothing so good for a light summer jacket as what is made at Manchester by the name of satteen, jeanet, or florentine, which is printed on each side, in imitation of cloth. This stuff far surpasses the others for lightness, comfort, durability, and every thing that can be required for warm weather.

Shoes and Gaiters.—To say nothing of being tormented with two or three dozen of buttons every morning, and having your ankles and knees in a state of confinement through a hard day's exercise, it need only be observed, that, if you step in the least puddle, you are wet; if you tread in moist ground, your shoe is pulled down at heel, and you are often liable to be annoyed by your shoes untying, and thorns and bits of stick, &c., getting into them, or between the buttons of your gaiters. How much more comfortable, then, is the dress here recommended! With lamb's-wool stockings and flannel drawers, put on a pair of overall boots, and then draw over them a pair of trowsers, which may be made either of fustian or leather, and so strongly defended inside the knees, that no thorn can penetrate. Thus you are equipped without trouble or loss of time, you have your muscles perfectly at liberty for hard exercise, and are free from every annoyance; not to say a word on the advantage and safety you have in the stirrup, if on horseback, or on the infallibility of this remedy against the annoyance of harvest bugs in September.—*Hawker.*

Drive, *v.* To force along by impetuous pressure; to force or urge in any direction; to guide and regulate a carriage; to make animals march along under guidance.

Driver, *s.* The person or instrument who gives any motion by violence; one who drives a carriage.

Driving, among sportsmen, is a method of taking pheasant powts. The sportsman having found out the haunts of these birds, and fixed his nets there, he calls them together with a pleasant call, imitating the voice of the dam; after this he makes a noise with his driver, which will make them run a little way forward in a cluster, and this he repeats till he has made sure of them, by driving them into his nets. * *

Drivers, among sportsmen, a machine for driving pheasant powts, consisting of good strong ozier wands, such as the basket makers use, set in a handle, and twisted or bound with small oziers in two or three places; with this instrument the sportsman drives the young powts into his nets.—*Ency. Lond.*

Drop, *s.* A globule of moisture; as much liquor as falls at once when there is not a continual stream.

Dropper, *s.* A dog of irregular breed.

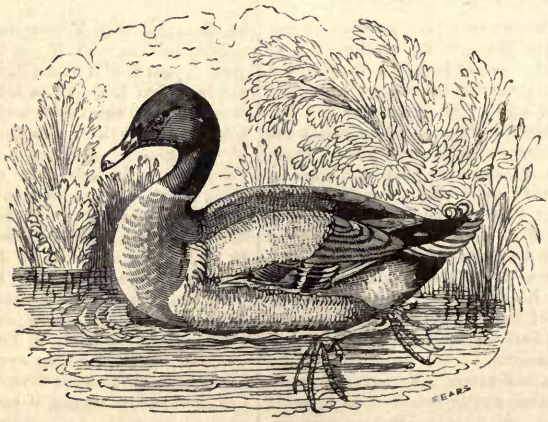
A breed between a pointer and a setter. It is deemed by some to be a good cross, but I never saw one of them that was worth much. They are by sportsmen termed *droppers*, and, what is very remarkable, if they are tolerably good themselves their breed falls off wonderfully.—*Thornton.*

Drove, *s.* A body or number of cattle; a number of sheep driven; any collection of animals.

Drug, *s.* An ingredient used in physic, a medicinal simple; anything without worth or value, anything for which no purchaser can be found.

Dub, *v. obs.* To form the body of a fly.

Duck, *s.* A water fowl, both wild and tame. *Vide* Anas.



Bimaculated Duck—Clucking Duck.—(*Anas glocitans.*)—Length twenty inches. Taken in a decoy in England. Has been met with along the Lena, and about the lake Baikal. Has a singular note, somewhat like clucking.

Long-tailed Duck or Swallow-tailed Sheldrake—(*Anas Glacialis*, Linn.; *Canard de Miclon*, Buff.) This species is considerably less than the last, and comes more nearly to the size of the widgeon. The flocks which visit the Orkney isles appear in October, and continue there till April; and "about sunset they are seen in vast companies going to and

returning from the bays, in which they frequently pass the night, making such a noise, as in frosty weather may be heard some miles." They are rather scarce in England, whither they come only in very hard winters, and even then but in small straggling parties. They fly swiftly, but seldom to a great distance, making a loud and singular cry. They are expert divers, and are supposed to live chiefly uponshell-fish

Tufted Duck—(*Anas Fuligula*, Linn.; *Le Petit Morillon*, Buff.) This is a plump, round, and short shaped species.

The male is distinguished by a pendent crest, overhanging the nape of the neck, two inches in length. The weight is about two pounds, length eighteen inches.

The habits, manners, and haunts of this species are much the same as those of the Golden-eye, and they return northward about the same time.—*Vide* Golden Eye — Morillon — Teal—Velvet Duck, &c.

* * *

The male bird is called mallard, and the young ones flappers. To find a brood of these, go, about July, and hunt the rushes in the deepest and most retired parts of some brook or trout stream; where, if you spring the old duck, you may be pretty sure that the brood is not far off. When once found flappers are easily killed, as they attain their full growth before their wings are fledged; and for this reason, the sport is often more like hunting water rats than shooting birds.

If you leave the brood after having disturbed them, the old bird will remove them to another place long before the following day.

When the flappers take wing they assume the name of wild ducks. About the month of August they repair to the corn fields, till disturbed by the harvest people. They then frequent the rivers pretty early in the evening, and show excellent sport to any one who has patience to wait for them. Our sporting writers in general have given no further directions for duck-shooting than to walk quietly up a brook, and shoot them as they rise. In doing this, if you have only a single gun, and should spring a bird at an uncertain distance, halloo out before you shoot, as there may be others under a bank, and much closer to you, that would spring on the discharge of your gun.

You need not be at a loss to know a wild duck. The claws in the wild species are black.—*Latham.*—*Bewick.*—*Hawker.*

Duck-gun, *s.* Gun for shooting ducks.

If a duck gun is too large in the calibre, in proportion to its weight of metal, it will recoil considerably; and if too small, it will not have the desired effect of allowing the shot to lie compactly together.

A gun fired from a rest is felt more than if held out; because the left hand, when grasping it, checks the recoil. The stock of a heavy duck-gun should be more bent than that of a common gun as, when we are holding out a great weight, it is not so easy to lower the head: and it should also be observed, that the curve in the stock tends to lessen the recoil.

I have of late years had the duck gun stocks, which I used on the coast, made with a pistol grip, and whipped with waxed-end round the handle, similar to a cricket-bat, which rather lessens the jar; and the upper part of the butt very much cut away, in order to prevent it from hurting the shoulder-bone. I also paint and varnish the stock, by which means it does not get cracked, after being wetted with salt-water. The gun-makers' stocks I found were always a great plague on this account, as well as from the trouble of keeping them in order, after being exposed to the spray of the sea. Add to which, they recoil most unmercifully, and are, therefore, only fit for light charges.

Trial at twelve sheets of thick brown paper, to ascertain the difference between two common duck-guns, and a very superior double gun, made by Mr. Joseph Manton.

	POUNDS.	FEET.	INCHES.	GAUGE.
Large duck-gun .	14	4	6	7
Smallest, do. .	12½	4	5	7
Double gun .	9	2	8	14

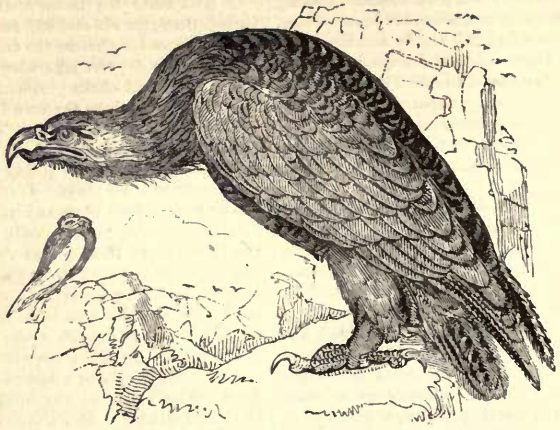
WITH NO. 2 SHOT.

	YARDS.	IN THE 1ST SHEET.	THROUGH THE 12TH SHEET.
Duck-guns .	60	32	25
Double gun	60	20	18
Duck-guns .	45	34	34
Double gun	45	26	26

The large guns were loaded with precisely double the charge of the small gun, which is one-fifth less than that with which they always killed best.

The paper was nailed up close to a sheet of water, and two men placed to observe that effect; which was, that the outside shot (that which flew wide of the paper) appeared to be driven with much more force from the heavy guns, and, of course, spread a much larger surface.

This proves that althongh, if both accurately levelled, the difference between a wild-fowl gun and a small gun, is not so very considerable, at a single bird; yet, from the immense circle which the large gun spreads, you have more chances of killing with an indifferent aim; and, of course, in a flock (as before said) would kill many more birds at a shot.—*Hawker.*



EAGLE, *s.* A bird of prey. A name given to the larger species of the Falcon family, differing in little but size from the true falcons.

There seem to be three well ascertained native species; the Golden Eagle, the Osprey, and what we call Eagle, from its frequent occurrence.

The Golden Eagle (*Falco chrysætos*, LINN.; *Le grand Aigle*, BUFF.) is the largest of the genus; it measures, from the point of the bill to the extremity of the toes, upwards of three feet; and in breadth, from wing to wing, above eight; and weighs from sixteen to eighteen pounds. The male is smaller, and does not weigh more than twelve pounds. The bill is of a deep blue colour; the cere yellow; the eyes are large, deep, sunk, and covered by a projecting brow; the iris is of a fine bright yellow, and sparkles with uncommon lustre. The general colour is deep brown mixed with tawny on the head and neck; the quills are chocolate, with white shafts; the tail is black, spotted with ash-colour; the legs are yellow, and feathered down to the toes, which are very scaly; the claws are remarkably large—the middle one is two inches in length.

This noble bird is found in various parts of Europe; it abounds most in warmer regions, and has seldom been met with farther north than the fifty-fifth degree of latitude. It is known to breed in the mountainous parts of Ireland: it lays three and sometimes four eggs, of which it seldom happens that more than two are prolific. Mr. Pennant says there are instances, though rare, of their having bred in Snowdon Hills. Mr. Wallis, in his Natural History of Northumberland, says—"it formerly had its aërie on the highest and steepest part of Cheviot. In the beginning of January, 1735, a very large one was shot near Warkworth, which measured, from point to point of its wings, eleven feet and a quarter."

The Ring-tailed Eagle (*Falco fulvus*, LINN.; *l'Aigle commun*, BUFF.) is the common eagle of Buffon, and, according to that author, includes two varieties, the brown and the black eagle; they are both of the same brown colour, distinguished only by a deeper shade, and are nearly of the same size: in both, the upper part of the head and neck is mixed with rust colour, and the base of the larger feathers marked with white; the bill is of a dark horn colour; the cere of a light yellow; the iris is hazel; and between the bill and the eye there is a naked skin of a dirty brown colour; the legs are feathered to the toes, which are yellow, and the claws

black; the tail is distinguished by a white ring, which covers about two-thirds of its length; the remaining part is black.

The ring-tailed eagle is more numerous and diffused than the golden eagle, and prefers more northern climates. It is found in France, Germany, Switzerland, Great Britain, and in America as far north as Hudson's Bay.

The White-tailed Eagle, Great Erne, or Cinereous Eagle (*Falco albicilla*, Linn.; *Le grand Pygargue*, Buff.) Of this there appears to be three varieties, which differ chiefly in size, and consist of the following: the great erne, or cinereous eagle, of Latham and Pennant; the small erne, or lesser white-tailed eagle; and the white-headed erne, or bald eagle. The first two are distinguished by their size, and the last by the whiteness of its head and neck. The white-tailed eagle is inferior in size to the golden eagle. The beak, cere, and eyes are of a pale yellow; the space between the beak and the eye is of a blueish colour, and thinly covered with hair; the sides of the head and neck are of a pale ash-colour, mixed with reddish brown; the general colour of the plumage is brown, darkest on the upper part of the head, neck, and back; the quill feathers are very dark; the breast is irregularly marked with white spots; the tail is white; the legs, which are of a bright yellow, are feathered a little below the knees; the claws are black.

This bird inhabits all the northern parts of Europe, and is found in Scotland and many parts of Great Britain. It is equal in strength and vigour to the common eagle, but more furious; and is said to drive its young ones from the nest, after having fed them only a very short time. It has commonly two or three young, and builds its nest upon lofty trees.

The Sea Eagle, (*Falco ossifragus*, Linn.; *L'Orfraie*, Buff.)—This bird is nearly as large as the Golden Eagle, measuring, in length, three feet and a half; but its expanded wings do not reach above seven feet. Its bill is large, much hooked, and of a blueish colour; irides in some light hazel, in others yellow: a row of strong bristly feathers hangs down from under his bill next to his his throat, whence it has been termed the Bearded Eagle: the top of the head and back part of the neck are dark brown, inclining to black; the feathers on the back are variegated by a lighter brown, with dark edges; the scapulars are pale brown, the edges nearly white; the breast and belly whitish, with irregular spots of brown; the tail feathers are dark brown, the outer edges of the exterior feathers whitish; the quill-feathers and thighs are dusky; the legs and feet yellow; the claws, which are large, and form a complete semicircle, are of a shining black.

It is found in various parts of Europe and America. It is said to lay only two eggs during the whole year, and frequently produces only one young bird; it is, however, widely dispersed, and was met with at Botany Island by Captain Cook. It lives chiefly on fish: its usual haunts are by the sea-shore; it also frequents the borders of large lakes and rivers; and is said to see so distinctly in the dark, as to be able to pursue and catch its prey during the night. The story of the eagle, brought to the ground after a severe conflict with a cat, which it had seized and taken up into the air with its talons, is very remarkable. Mr. Barlow, who was an eye-witness of the fact, made a drawing of it, which he afterwards engraved.

In their native districts these noble birds are generally seen near the sea-shore, or upon the rocky precipices on the margin of the inland lakes, from whence they pounce upon the fish while swimming near the surface of the water. Aquatic birds also become their frequent prey. They generally choose the most inaccessible cliffs for building their nests, laying one and sometimes two eggs, entirely white, and nearly the size of that of a goose; one of these, in Selby's possession, was laid by a bird after it had been in confinement twenty years.

* *

Montagu, speaking of the cinereous or sea-eagle, says, "The specimen from which this description is taken, was killed by Sir Robert Littleton's game-keeper in Shropshire. It was accompanied by a letter from Sir Robert, the purport of which was, that his servant being out shooting, saw two large birds feeding on the carcase of a sheep, which appeared recently killed; that having nothing but small snipe-shot with him, he turned back, intending to go home for larger; that the eagles then followed him, and frequently came so near, that he concluded they meant either to attack him or his dogs. Suddenly losing sight of one, he judged it was very near him behind, and being somewhat alarmed, turned and shot at it in a hurry; after which the bird flew some hundred yards, and dropped. On his approach it was vomiting blood; and he killed it after a struggle of half an hour." He adds, that it was the larger of the two.

* * *

John Maxwell, Esq., of Ardbraccan, in Ireland, favoured us with two young birds of this species alive, taken the preceding year on a mountainous precipice, or craggy cliff, called Slieve Donard, impending over the sea, in the county of Down. That gentleman informed us that two men, covered with sackcloth and armed, were lowered by ropes to the aërie which, with considerable difficulty, they robbed of two young, leaving only one addled egg behind. The old eagles being so furious as

to create serious alarm, neither the nest nor colour of the egg were noticed. Some fragments of flesh were in the nest.

The eaglets were covered with a glossy, dark, murry-coloured down. A basket was attached to the ropes that conveyed the men down: into this the young birds were put; but from the violence and amazing strength of the parent birds, they were with difficulty carried off. These birds were not twelve months old when we received them. On their first moulting they became much darker, particularly about the breast and thighs, the latter almost wholly of a dusky black. At two years old, the base of the bill became yellow; in the third year there was not any material change. At this time one of them killed and devoured the other, probably from some neglect in feeding them, as before that event they lived together in perfect harmony.

* * *

From the astonishing height these and some other birds fly, we are led to believe that they are capable of living in a much lighter atmosphere than any other animals. From the top of some of the highest mountains in Scotland, we have seen several of them soaring together at so great a distance as to appear scarce larger than a swallow. It is said to prey indiscriminately on land animals, fish, and aquatic birds, and probably every animal of inferior strength suffers from its rapacity.

Two of this species contending in the air over Loch Lomond, in the Scottish Highlands, became so firmly grappled to each other by their talons, that they were precipitated into the water. The uppermost regained the power of its wings, but the other was taken alive by a Highlander, who witnessed the scene, and who waited till the wind had wafted him near the shore. This curious account was received from an officer who bought the eagle. * *

Although this is an extremely bold bird, it will not venture to contend with a dog or a fox in its natural state. An eagle and a fox were observed to be regaling themselves on the carcase of a goat, that had fallen down a precipice in the Highlands of Scotland. The latter frequently obliged the other to desist, and retreat a little, but it was not sufficiently alarmed to prevent returning; and it occasionally threw itself into bold and picturesque attitudes of defence, spreading the wings and tail, and erecting every feather.

* * *

Montagu says, "Two living eagles were sent to us from Ireland, and were, on their arrival at Bristol, detained by an officer of excise, upon a plea that there was a duty upon all singing-birds. Had this happened on the other side of the water, it might have been termed an Irish story. The unfortunate birds would, however, have been starved at the custom-house, if application had not been made to the head of that department in the port of Bristol, offering to pay any demand for their release, if legally detained for their vocal abilities. By this officer it was most wisely determined, after some consideration, that eagles could scarcely be considered as singing-birds." * *

The eagles in the Isle of Rum have nearly extirpated the stags that used to abound there.

They generally build in clefts of 'rocks near the deer forests; and make great havoc among them, the white hares, and the ptarmigans. Willoughby gives the following curious account of the nest of this species:—"In 1668, in the woodlands near the River Derwent, in the peak of Derbyshire, was found an eagle's nest, made of great sticks, resting one end on the edge of a rock, the other on two birch trees; upon which was a layer of rushes, and over them a layer of heath, and upon the heath rushes again; upon which lay one young one and an addled egg; and by them a lamb, a hare, and three heath poults. The nest was about two yards square, and had no hollow in it."—*Bewick—Montagu — Willoughby — Selby — Pennant.*

EAGLE-EYED, *a.* Sharp-sighted as an eagle.

EAGLET, *s.* A young eagle.

EAR, *s.* The whole organ of audition or hearing; the spike of corn, that part which contains the seeds.

EARWIG, *s.* A sheath-winged insect.

EARTH, *v.* To hide in earth; to force an animal to his concealment or den—as to earth a fox or badger.

ECARTÉ, *s.* A game at cards.

Ecarté is played by two persons with a pack of thirty-two cards, as at piquet. It is customary to have two packs, and of different colours for the sake of distinction. The pack to be first dealt with is placed on the right hand of the dealer, and the other at his left.

Though only two persons can play at the same time, it is not unusual to admit one or more into the game, the winner or loser, as may be agreed, resigning his seat to the next in rotation, and this is called *playing a fool.* The game consists of five points, unless it be otherwise agreed upon by the players.

OF CUTTING FOR THE DEAL.

1. He who cuts the highest card is entitled to the deal. In most games the lowest card takes the deal, but it is the reverse at ecarté, the deal being considered an advantage on account of the king, of which we shall speak hereafter.

2. He who does not show the card he cuts, is considered as having cut the lowest in the pack.

3. He who shows two cards in cutting is considered as having cut the lowest of the two.

4. The cut for the deal is good, even with a defective pack.

5. In playing a rubber, the deal goes on regularly as at all other games.

6. The order of the cards is as follows: king, queen, knave, ace, ten, nine, eight, seven.

OF THE DEAL, THE MISDEAL, AND THE TURN UP CARD.

1. The person who gains the deal shuffles the cards, presents them to his adversary to cut, and then deals ten cards, five to his adversary and five to himself. He distributes them by three and two, or two and three, at his option, beginning with his adversary, turns up the eleventh card as the trump, and places the remainder of the pack or stock, as it is called, at his right hand.

2. The order of dealing observed at the beginning of the game must be continued as long as the game lasts. For instance, if the dealer began with three and two, he cannot change and give two and three; and *vice versâ.*

3. If there be one or more faced cards in the pack, and it be discovered before either hand has been seen, the deal is void, unless it be the eleventh card, which, being the one that is to be turned up, can effect no alteration in the game.

4. If it be not discovered till after the discard has been put out, and the faced card or cards come to the dealer, the deal is good, and the faced card or cards must form a part of his hand. If, on the contrary, a faced card come to the elder hand, he may, at his option, consider the deal good, or call a new deal; for this reason, that the fault being committed by the dealer, the elder hand ought not to suffer for it.

5. It sometimes happens, that the dealer turns up one or more cards in dealing. If they chance to be his own cards, the deal is good, for the knowledge thus acquired by his adversary, of one or more of the cards in his hand, can be prejudicial only to himself, and he ought to submit to the penalty of his fault: if he turn his adversary's card, the deal goes on, but it is optional with the adversary to allow it to stand, or to call a new one. Some persons contend, that the moment a card is seen there ought to be a new deal. This is by no means a just rule. An unfair or not strictly scrupulous player, who might know some of the cards in the pack, might perhaps purposely turn up a card or two in dealing, if he found he was giving good cards to his adversary, and would incur no penalty but the trouble of dealing again.

6. When a player deals out of turn, and it is discovered before the trump card is seen, there must be a new deal: but if not discovered till after the trump card is known, or before the parties have discarded or played, the pack, just as it is, is left for his next deal, and the game proceeded in by the right person dealing with the other pack: if the play have commenced, or the discard been put out before the discovery, the deal is good.

7. Should there be a misdeal, and it be discovered before either party has seen his hand, it may be made good by restoring the cards to the order in which they would have fallen had no misdeal been made.

8. If the elder hand perceive that the dealer has not given him as many cards as he asked for, and the mistake be discovered before the dealer has seen the cards he has to take in, it may be rectified in the same manner as in the preceding case.

9. If the cards have been seen by both parties, and the dealer should have a deficiency, it is in the option of the adversary, either to allow him to supply the deficiency, from the uppermost cards of the stock, or oblige him to lose the deal; if the dealer should have a card too many, his adversary has the option of drawing a card from his hand by chance, or obliging him to lose the deal.

10. If the elder hand should have a deficiency, it is optional with him to supply it from the stock, or claim the deal; if he have too many cards, he may either discard them, or claim the deal.

11. If however it can be proved, that the fault did not originate with the dealer, as, for instance, where the elder hand has asked for three cards and has only discarded two, or has asked but for two and discarded three, then the elder hand shall lose one point, and not be allowed to reckon the king.

12. He who after having taken in his cards for his discard, plays with more than five cards, loses a point, and also the right of marking the king.

13. When the dealer turns up two or more cards, instead of one for the trump, it is optional with the adversary to claim what would have been the turn-up card, if the order had not been deranged, or to place the cards seen at the bottom of the stock and have a new cut, or to call a new deal.

OF THE KING, AND THE TURN UP OR TRUMP CARD.

1. He who turns up a king gains and marks one point: he who holds the king of the suit turned up, gains and marks one point.

2. The king must be declared before it is played, by the holder of it saying, I hold the king: it may also be declared after it has been played; but, in that case, it must be the leading card, and not have been covered by the adversary's card; for if covered before declared, the point cannot be marked.

3. This rule applies only to the elder hand; the second player must always declare the king before he plays it; but it is his interest not to declare it till after his adversary has played his first card.

4. The suit of the turn up card, or trump, is superior to all the other suits.

OF DISCARDING.

1. If the elder-hand be dissatisfied with his cards, he proposes to exchange them in whole or in part, by saying, I discard, or I propose, or if you please, or any other equivalent phrase. If the second player be also dissatisfied with his hand, he accedes to the proposal by saying, How many? He then gives the elder hand as many cards as he demands, and afterwards takes as many as he wants himself to the full number of the whole hand, five cards each, if requisite.

2. He who has once proposed cannot refuse the cards given him.

3. If after the first exchange the elder hand be still not content with his cards, he may ask for more three or four times successively, till the thirty-two cards are exhausted, but the dealer, from first to last, is always at liberty to accept or refuse.

4. Each player before he takes in new cards, must throw his discard on the table apart from the stock, and the cards put out must all be mixed together. The discard made, neither player can demand more or less cards than he requested, nor is he allowed to look at those which have been discarded.

5. It sometimes happens, that, after several exchanges have been made, the elder hand having proposed again, and the dealer having inconsiderately asked, How many, there are not cards enough left to satisfy his demand. In this case he who has proposed is not the less bound to have other cards; but as he cannot have them from the stock, there being no stock left, he is obliged to supply the deficiency from his last discard.

6. He who looks at his discard, after he has made it, is obliged to play with his hand exposed on the table.

7. When, after the first deal, the elder hand proposes, and the other refuses, the one who refuses loses two points, if he do not make three tricks.

8. In the same manner when the elder hand plays without proposing, he loses two points, if he do not win three tricks.

9. If, in giving new cards to the proposer, the dealer turn up a card for the trump, in mistake as at the original deal, he cannot refuse a second discard, should his adversary demand it.

OF THE MANNER OF PLAYING.

1. The elder hand plays first.

2. The first player is bound to play in the suit he names; for instance, if he should say hearts, and play clubs, or any other suit, he is obliged, if his adversary insist on it, to take up the card he has played, and to play in the declared suit.

3. If the adversary deem the card played more advantageous to his own hand than the declared suit, he plays to it, and the card once covered cannot be recalled in order to play a different suit.

4. He who plays before his turn is only obliged to take up his card again, if it have not been played to; but if it be covered, the trick is good. In this case, as in the preceding one, both players having been in fault, one for having played and the other for having allowed him to play out of turn, no penalty is incurred.

OF THE SCORE AND VOLE.

1. When both parties have done discarding, he who wins three tricks reckons one point; if he win every trick he reckons two points, and has won the vole.

2. Two points only can be made in the same deal, unless you hold the king. To make two points without the king or three with the king, is called winning the vole.

OF THE REVOKE AND UNDER-FORCE.

1. It is not allowable to revoke, or to under-force.

2. When one of the players has revoked or under-forced, as soon as it is discovered the cards are taken up and played over again; but the person in fault, if he win the vole, counts only one point for it, and nothing if he win the point only.

GENERAL RULES.

1. For the cut to be good, at this as at every other game, two cards, at least, must be left of the pack.

2. Each player has a right to ask for new cards as often as he pleases.

3. When a player takes tricks that do not belong to him, and reckons them as his own,

a bystander has a right to mention it; and so as to any other unfair play.

4. He who, under whatever pretence, looks at his adversary's tricks, is bound to play out the hand with his cards exposed on the table.

5. A card escaping from a hand, and falling under the table, is not considered as played, unless it has been played to, or has covered, wholly or in part, the adversary's card.

6. If a player from mistake or ill humour should throw down and mix his cards, the adversary scores two points.

7. He who quits the game loses it; but should there be bets depending, the adversary is bound to continue the game with some one of the bystanders, for the benefit of the persons so interested.

9. When the pack is defective, by consisting of too many, or too few cards; the deal in which it is discovered is void, but the preceding ones stand good.

OF BETTING.

1. He who bets on one of the players has a right to advise him in playing the game.

2. He who wins a bet is bound to give his adversary his revenge, but the loser is not obliged to take it.

3. The players have the privilege of accepting bets in preference to a bystander.

4. Betting being optional and not arbitrary, the bets that are made must be mentioned at every game.

5. Every case not provided for by the foregoing rules ought always to be decided against the player who is in fault.—*Hoyle.*

ECHINUS, *s.* A hedgehog; a shell-fish set with prickles. *Vide* HEDGEHOG.

EDDY, *s.* The water that, by some repercussion, or opposite wind, runs contrary to the main stream; generally a favourite cast in fly-fishing.

EEL, *s.* A serpentine slimy fish, that lurks in mud.

Very little is yet known of the natural history of the eel; indeed, the element in which they live almost precludes us from that access to them which is necessary to enable us to observe their habits and economy. The eel is evidently a link between the fish and serpent, but, unlike the former, it can exist a long time out of water, which its nocturnal migrations prove, though probably a certain degree of moisture on the grass is necessary to enable it to do this.

The haunts of the eel are among weeds, under roots, stumps of trees, in holes and clefts of the earth, both in the banks, and at the bottom in the plain mud, where they lie with only their heads out, watching for their prey; they are also to be found under great stones, old timber, about bridges, floodgates, weirs, and also mills, except when the water is rendered thick by rains, for then they come out, and will bite eagerly. They are in best season from May until July: a running line should be used, which must be very strong, and the hook No. 3, or 4, with a plumb or pistol bullet upon it. They are to be angled for on the ground, and two or more rods may be employed (if ground bait be thought necessary, it should be the same as for the barbel); the prime bait is the lob-worm, and they bite eagerly all day, in dark cloudy weather, after showers, attended with thunder and lightning, when the water is high and discoloured; but those who venture upon night angling, will have far greater success when the weather is warm and the night dark. They are then to be angled for upon the shallows, where there is a current, or by the side or tail of a stream, with a sandy or gravelly bottom, with the bait on the ground; they will be felt to tug sharply when they seize the bait, give time (which is necessary both in day and night angling), and there will be no doubt of sport from night-fall until day-break, when they directly flee to their hiding places.

The largest eels are caught by night lines. It is of little consequence where they are laid, as they will succeed in streams (where the eels rove in search of prey), as well as in still waters, and they will take frogs, black snails, worms, roach, dace, gudgeon, minnows (which two last are best), loaches, bleaks, and millers' thumbs. A sufficient quantity of links of twelve hairs should be doubled, and a hook tied to each link; these are to be noosed at proper distances to pieces of cord of fifteen feet long; bait the hooks by making an incision with the baiting needle under the shoulder and thrusting it out at the middle of the tail, drawing the link after it; the point of the hook should be upright towards the back of the baitfish; fasten one end to the bank or a stub, and cast the other into the water, but not to the extent of the line (as eels will run a little before they gorge): the lines should be taken up early in the morning; such of the lines as have eels at them will be drawn very tight. Dark nights in July, August, and September, are the best for this kind of fishing.

Another method of taking eels, when the water is clear and low, is called snigling, and is performed with a stick about a yard long, with a cleft at each end, and a strong needle well whipped to a small whipcord line from the eye down to the middle. In baiting, run the head of the needle quite up into the head of a lobworm, letting the point come about

the middle; then put the point of the needle into the cleft at either end of the stick, and taking both stick and line together in one hand, put the bait softly into holes under walls, stones, &c., where eels hide themselves; if there be an eel there, he will take the worm and needle out of the cleft. Draw back the stick gently (having slackened the line), and give time for his swallowing the bait; then strike, and the needle will stick across his throat. Let him tire himself with tugging, previous to any attempt to pull him out, for he lies folded in his den, and will fasten his tail round anything for his defence. The largest eels are generally taken about the hollow stone-work of old bridges (the angler being in a boat), and are sometimes caught in considerable numbers.

A third plan for taking eels is by what is termed bobbing, which is best managed in a boat. This is done by taking a quantity of well-scoured lobworms; have a long needle, with three lengths of worsted slightly twisted together; put the needle lengthways through the worms, and draw them down on the worsted. When there is two yards thus prepared, then fold them up in links, and tie them to about two yards of good twine, and make a knot on it eight inches from the worms; and slipping a piece of lead, with a hole in it (weighing from a quarter to three quarters of a pound, according to the current fished in), down the line to the knot; fasten the line to a manageable pole, and let the lead lie on the bottom in thick, muddy water, when the tide runs up strong, or near the mouth of some river. When the eels nibble at the bait, they can be felt; give some little time before it is pulled up, which must be gently until near the surface, and then hoist out quickly. The worsted sticking in the eels' teeth, prevents their loosening themselves until the line is slackened by throwing them into the boat, or on the ground. So soon as they are disentangled, throw the bait in again. Frequently great quantities are thus caught, especially of grigs. Eels are also to be snared in the same way as the pike, and in the fens numbers are speared by an instrument with three or four forks, or jagged teeth, which is struck at random into the mud.

* * *

The most extraordinary peculiarity in the natural history of the eel, is its double migration, one up and one down rivers, one from and the other to the sea; the first in spring and summer, and the second in autumn or early in winter. The first, of very small eels, which are sometimes not more than two or two and a half inches long; the second, of large eels, which sometimes are three or four feet long, and weigh from ten to fifteen, or even twenty pounds. There is great reason to believe, that all eels found in fresh water are the results of the first migration. They appear in millions, in April and May, and sometimes continue to rise as late even as July and the beginning of August. I remember this was the case in Ireland, in 1823. It had been a cold backward summer, and when I was at Ballyshannon, about the end of July, the mouth of the river, which had been in flood all this month, under the fall, was blackened by millions of little eels, about as long as the finger, which were constantly urging their way up the moist rocks by the side of the fall. Thousands died, but their bodies remaining moist, served as the ladder for others to make their way; and I saw some ascending even perpendicular stones, making their road through wet moss, or adhering to some eels that had died in the attempt. Such is the energy of these little animals, that they continue to find their way, in immense numbers, to Loch Erne. The same thing happens at the fall of the Bann, and Loch Neagh is thus peopled by them: even the mighty Fall of Schaffhausen does not prevent them from making their way to the Lake of Constance, where I have seen many very large eels.

There are eels in the Lake of Neufchatel, which communicates, by a stream, with the Rhine; but there are none in the Leman Lake, because the Rhone makes a subterraneous fall below Geneva; and though small eels can pass by moss or mount rocks, they cannot penetrate limestone, or move against a rapid descending course of water, passing, as it were, through a pipe. Again: no eels mount the Danube from the Black Sea; and there are none found in the great extent of lakes, swamps, and rivers, communicating with the Danube, though some of these lakes and morasses are wonderfully fitted for them, and though they are found abundantly in the same countries, in lakes and rivers connected with the ocean and Mediterranean. Yet, when brought into confined water in the Danube, they fatten and thrive there. As to the instinct which leads young eels to seek fresh water, it is difficult to reason; probably they prefer warmth, and, swimming at the surface in the early summer, find the lighter water warmer, and likewise containing more insects, and so pursue the courses of fresh water, as the waters from the land, at this season, become warmer than those of the sea.

Mr. J. Couch, (*Lin. Trans.* t. xiv. p. 70) says, that the little eels, according to his observation, are produced within reach of the tide, and climb round falls to reach fresh water from the sea. I have sometimes seen them, in spring, swimming in immense shoals in the Atlantic, in Mount Bay, making their way to the mouth of small brooks and rivers. When

the cold water from the autumnal floods begins to swell the rivers, this fish tries to return to the sea; but numbers of the smaller ones hide themselves during the winter in the mud, and many of them form, as it were, in masses together. Various authors have recorded the migration of eels in a singular way,—such as Dr. Plot, who, in his History of Staffordshire, says, that they pass in the night, across meadows, from one pond to another: and Mr. Arderon, (in *Trans. Royal Soc.*) gives a distinct account of small eels rising up the floodgates and posts of the water works of the city of Norwich; and they made their way to the water above, though the boards were smooth planed, and five or six feet perpendicular. He says, when they first rose out of the water upon the dry board, they rested a little—which seemed to be till their slime was thrown out, and sufficiently glutinous—and then they rose up the perpendicular ascent with the same facility as if they had been moving on a plane surface.—(*Trans. Abr.* vol. ix. p. 311.) There can, I think, be no doubt, that they are assisted by their small scales, which, placed like those of serpents, must facilitate their progressive motion: these scales have been microscopically observed by Leuwenhoek.—(*Phil. Trans.* vol. iv.) Eels migrate from the salt-water of different sizes, but I believe never when they are above a foot long—and the great mass of them are only from two and a half to four inches. They feed, grow, and fatten in fresh water. In small rivers they are seldom very large; but in large deep lakes they become as thick as a man's arm, or even leg; and all those of a considerable size attempt to run to the sea in October or November, probably when they experience the cold of the first autumnal rains. Those that are not of the largest size, as I said before, pass the winter in the deepest parts of the mud of rivers and lakes, and do not seem to eat much, and remain, I believe, almost torpid. Their increase is not certainly known in any given time, but must depend upon the quantity of their food; but it is probable they do not become of the largest size from the smallest in one or even two seasons: but this, as well as many other particulars, can only be ascertained by new observations and experiments. Block states, that they grow slowly, and mentions, that some had been kept in the same pond for fifteen years.

As very large eels, after having migrated, never return to the river again, they must (for it cannot be supposed they all die immediately in the sea) remain in salt water; and there is great probability, that they are then confounded with the conger, which is found of different colours and sizes, from the smallest to the largest, from a few ounces to one hundred pounds in weight. The colour of the conger is generally paler than that of the eel; but, in the Atlantic, it is said, that pale congers are found on one side of the Wolf Rock, and dark ones on the other. The conger has breathing tubes, which are said not to be found in the other eel; but to determine this, would require a more minute examination than has yet been made. Both the conger and common eel have fringes along the air-bladder, which are probably the ovaria; and Sir E. Home thinks them hermaphrodite, and that the seminal vessels are close to the kidneys. I hope this great comparative anatomist will be able to confirm his views by new dissections, and some chemical researches upon the nature of the fringes and the supposed melt. If viviparous, and the fringes contain the ova, one mother must produce tens of thousands, the ova being remarkably small; but it appears more probable, that they are oviparous, and that they deposit their ova in parts of the sea near deep basins, which remain warm in winter. This might be ascertained by experiment, particularly on the coast of the Mediterranean. I cannot find that they haunt the Arctic Ocean, which is probably of too low a temperature to suit their feelings or habits; and the Caspian and Black Sea are probably without them, from their not being found in the Volga or Danube; these being shallow seas, are perhaps too cold for them in winter. From the time (April) that small eels begin to migrate, it is probable that they are generated in winter, and the pregnant eels should be looked for in November, December, and January. I opened one in December, in which the fringes were abundant, but I did not examine them under the microscope, or chemically. I trust this curious problem will not remain much longer unsolved.

* * *

An amazing number of eels are bred in the two large ponds in Richmond Park, which is sufficiently evident from the very great quantity of young ones which migrate from those ponds every year. The late respectable headkeeper of that park assured me, that, at nearly the same day in the month of May, vast numbers of young eels, about two inches in length, contrived to get through the pen-stock of the upper pond, and then through the channel which led into the lower pond, from whence they got through another pen-stock into a water-course which led them eventually into the River Thames. They migrated in one connected shoal, and in such prodigious numbers, that no guess could be given as to their probable amount. * *

The winter retreat of eels is very curious. They not only get deep into the mud, but in Bushy Park, where the mud in the ponds is not very deep, and what there is is of a sandy nature, the eels make their way under the

banks of the ponds, and have been found knotted together in a large mass.

* * *

Eel-weirs are common in almost all the rivers in Ireland. There are some large ones at, or near Enniskillen, where great quantities of these fish are caught; they are not natives of the lake, but come from the sea when very young, and are intercepted in their return; they never take a bait, nor are ever known to eat any kind of food. Lord Belmore has kept some in boxes for a year, and found this to be the case.

The country people catch them by extending across the water a band of hay, in which the eels get so entangled, as not to be able to disengage themselves, and by these means are easily taken. * *

There is a very singular eel found in the river Barrow near Carlow. It is like the gillaroo, has a gizzard. This eel is said to be particularly delicious when introduced to table.

* * *

The common eel will grow to a large size, sometimes to weigh twenty pounds, but that is extremely rare; in 1799 one was taken out of the Kennet, near Newbury, which weighed fifteen pounds. As to instances brought by Dale and others, of these fish increasing to a superior magnitude, there is much reason to suspect them to have been congers; since the enormous eels they describe, have all been taken at the mouth of the Thames or Medway.

* * *

The following curious fact is recorded by Mr. Swallow, some years since the British Consul-General in Russia:—Having occasion to go from Petersburgh to Moscow, where eels are a great rarity, he ordered some, to carry as a present; upon being taken out of the water, they were thrown upon the ground to be frozen, and soon appeared quite dead, and almost a piece of ice; they were then packed in snow, and when arrived at Moscow, which was four days after, the eels being put into cold water, and so thawed, discovered gradually signs of life, and soon perfectly recovered!

* * *

The eel was anciently said to possess the power of enforcing sobriety upon the most devoted subject of the jolly god. "If you would some notorious drunkard and common swil-bowle to loth and abhorre his beastlie vice, and for ever after to hate the drinking of wine, put an eele alyue into some wyde mouthed potte with a couer, hauing in it suche a quantitie of wine as may suffice of itselfe to suffocate and strangle the eele to death; which doone, take out the dead eele, and let the partie, whom you would have reclaymed from his bibacitie, not knowing hereof, drinke of that wine onely, euen as much as he listeth."—*Jesse—Daniel—Sir H. Davy, &c.*

Eft, *s.* A newt, an evet, a small lizard.

Egg, *s.* That which is laid by feathered animals, from which their young is produced; the spawn or sperm of creatures.

Eggs of Birds.—By experiment it appears that birds do not instinctively know the necessary time of incubation.

Those who suppose a bird capable of producing eggs at will, or that any bird is excited to lay more eggs than usual by daily robbing their nest, are certainly mistaken. In a domesticated fowl it is probable the desire of incubation may be prolonged by leaving little or nothing in the nest to sit on. It will therefore lay the number allotted by nature, which is determined before the first egg is produced.

It is but few birds, if any, that would produce a second lot of eggs in the same season if unmolested; but if their nests are destroyed, it is probable three or four separate lots may be produced.

The growth of an egg after impregnation is exceedingly rapid; the yolk only is formed in the *ovarium*, where it remains till within twenty-four hours of its being produced; when that part is fully matured, it separates and falls down the *oviduct* into the *uterus*, where the egg is perfectly formed; first, the *vitellus* or yolk is surrounded by the *albumen* or white; and lastly is covered with a calcareous shell. The very expeditious growth of these last appear to be an extraordinary exertion of nature. The calcareous covering of an egg is concreted and formed in a most expeditious manner; a few hours only seem necessary for this work. Only one *vitellus* separates from the *ovarium* at a time, (except as we shall hereafter mention,) till the exclusion of which no other succeeds. But this is a daily production, with few exceptions, there is no more time allowed for perfecting the *albumen* and shell than twenty-four hours.

Colours of Eggs.—It was a notion of Darwin's that the variety in the colours of eggs, as well as in the colours of many animals, is adapted to the purposes of concealment from their natural enemies. Thus, he remarks, that the eggs of the hedge-chanter (*Accentor modularis*) are greenish blue, as are those of magpies and crows, which are seen from beneath in wicker nests, between the eye and the blue of the firmament. M. Glöger, a German naturalist, has followed up this singular theory into some detail, and

considers it to be a remarkable provision of nature, that birds whose nests are most exposed, and whose eggs are most open to the view of their enemies, lay eggs of which the colour is the least distinguishable from that of surrounding objects, so as to deceive the eye of birds, or other plundering animals; while birds, the eggs of which have a bright decided colour, and are consequently very conspicuous, either conceal their nests in hollows, or only quit their eggs during the night, or begin to sit immediately. It is also to be remarked that in the species of which the nest is open, and the female brings up the brood without the assistance of the male, these females are generally of a different colour from the male, less conspicuous, and more in harmony with the objects around.

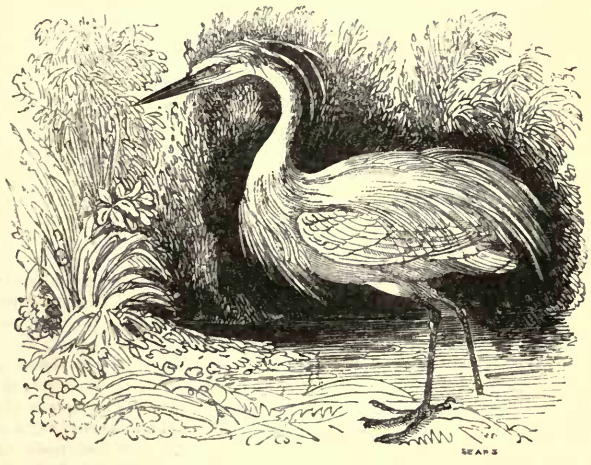
* * *

Eggs of Game.—Taking or wilfully destroying the eggs of game, subjects the offender to the following penalties for each egg:—

Pheasant, partridge, swan .	£1	0	0
Any wild-fowl, crane, bustard (and one year's imprisonment for the offence) .	0	1	8
Bittern, heron, shoveller .	0	0	8

Rennie—Montagu, &c.

Egret (*Ardea garzetta*, Linn.; *Egretta*, Buff.), *s.* A fowl of the heron kind.



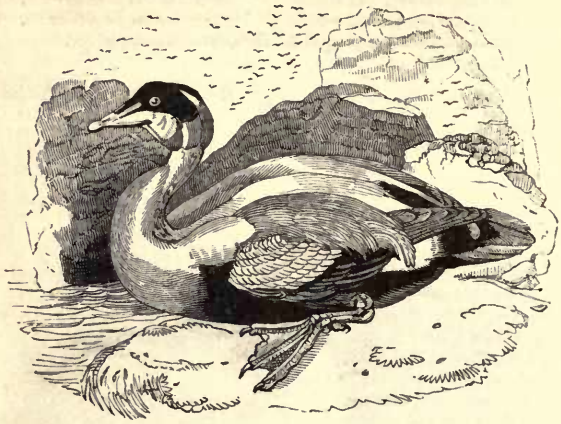
The egret is one of the smallest, as well as the most elegant of the heron tribe: its shape is delicate, and its plumage as white as snow; but what constitute its principal beauty are the soft, silky, flowing plumes on the head, breast, and shoulders: they consist of single slender shafts, thinly set with pairs of fine soft threads, which float on the slightest breath of air. Those which arise from the shoulders are extended over the back, and flow beyond the tail. These plumes were formerly used to decorate the helmets of warriors: they are now applied to a gentler and better purpose, in ornamenting the head-dresses of the European ladies, and the turbans of the Persians and Turks.

The egret seldom exceeds a pound and a half in weight, and rarely a foot and a half in length. A bare green skin is extended from the beak to the eyes, the irides of which are pale yellow: the bill and legs are black. Like the common heron, they perch and build their nests on trees, and live on the same kinds of food.

This species is found in almost every temperate and warm climate, and must formerly have been plentiful in Great Britain, if it be the same bird as that mentioned by Leland in the list or bill-of-fare prepared for the famous feast of Archbishop Nevil, in which one thousand of these birds were served up. No wonder the species has become nearly extinct in this country.—*Bewick.*

Egyptiacum, *s.* Liniment of verdigris. It is useful in diseases of the frog and heel, and is formed by boiling five ounces of powdered verdigris, one pound of honey, and seven ounces of vinegar, until they are incorporated.

Eider Duck, St. Cuthbert's Duck, or Great Black and White Duck (*Anas mollissima*, Linn.; *L'Eider*, Buff.), *s.*



This wild but valuable species is of a size between the goose and the domestic duck, and appears to be one of the graduated links of the chain which connects the two kinds. The full-grown old males generally measure about two feet two inches in length, and two feet eight in breadth, and weigh from six to above seven pounds. The head is large; the middle of the neck small, with the lower part of it spread out very broad, so as to form a hollow between the shoulders, which while the bird is sitting at ease, seems as if fitted to receive its reclining head. The bill is of a dirty yellowish horn colour, darkish in the middle, and measures, from the tip to the corners of the mouth, two inches and a half: the upper mandible is forked in a singular manner towards each eye, and is covered with white feathers on the sides, as far forward as the nostrils. The upper part of the head is of a soft velvet black, divided behind by a dull white stroke pointing downwards: the feathers from the nape of the neck to the throat, are long, or puffed out, overhanging the upper part of the neck, and look as if they had been clipped off at the lower ends; they have the appearance of pale pea-green velvet shag, with a white line dropping downward from the auriculars on each side. The cheeks, chin, upper part of the neck, back, and lesser wing coverts, are white; the scapulars, and secondary quills, next the body, dirty white: bastard wings, and primary quills, brown; the secondaries and greater coverts are the same, but much darker: the lower broad part of the neck, on the front, to the breast, is of a buff colour; but in some specimens tinged with rusty red: the breast, belly, vent, rump, and tail coverts, are of a deep sooty black: tail feathers hoary brown: legs short and yellow: webs and nails dusky. The female is nearly of the same shape, though less than the male, weighing only between five and six pounds; but her plumage is quite different, the ground colour being of a reddish brown, prettily crossed with waved black lines: and in some specimens the neck, breast, and belly, are tinged with ash: the wings are crossed with two bars of white: quills dark: the neck is marked with longitudinal dusky streaks, and the belly is deep brown, spotted obscurely with black.

The eider duck lays from three to five large, smooth, pale olive-coloured eggs; these she deposits and conceals in a nest, or bed, made of a great quantity of the soft, warm elastic down, plucked from her own breast, and sometimes from that of her mate. The groundwork or foundation of the nest is formed of bent grass, sea weeds, or such like coarse ma-

terials, and it is placed in as sheltered a spot as the bleak and solitary place can afford.

In Greenland, Iceland, Spitzbergen, Lapland, and some parts of the coast of Norway, the eiders flock together, in particular breeding places, in such numbers, and their nests are so close together, that a person in walking along can hardly avoid treading upon them. The natives of these cold climates eagerly watch the time when the first hatchings of the eggs are laid: of these they rob the nest, and also of the more important article, the down with which it is lined, which they carefully gather and carry off. These birds will afterwards strip themselves of their remaining down, and lay a second hatching, of which also they are sometimes robbed; but, it is said, that when this cruel treatment is too often repeated, they leave the place, and return to it no more.

The eider birds build their nests on little islands, not far from the shore, and sometimes even near the dwellings of the natives, who treat them with such kindness and circumspection as to make them quite tame. In the beginning of June they lay five or six eggs, and it is not unusual to find from ten to sixteen eggs in one nest, with two females, who agree remarkably well together. The whole time of laying continues six or seven weeks, during which time the natives visit the nest, for the purpose of taking the down and eggs, at least once a week. They first carefully remove the female, and then take away the down and part of the eggs; after which she lays afresh, covering her eggs with new down plucked from her breast; this being taken away, the male comes to her assistance, and covers the eggs with his down, which is left till the young are hatched. One female, during the whole time of laying, generally gives half a pound of down. The down from the dead birds is accounted of little worth, having lost its elasticity. There are generally exported fifteen hundred or two thousand pounds of down on the company's account, exclusive of what is privately sold.—The young ones quit the nest soon after they are hatched, and follow the female, who leads them to the water, where, having taken them on her back, she swims with them a few yards, and then dives, and leaves them floating on the water: in this situation they soon learn to take care of themselves, and are seldom afterwards seen on the land, but live among the rocks, and feed on insects and sea-weed.

* * *

"In my way hither," says Major C., "I measured the flight of the eider ducks by the following method; viz., on arriving off Duck Island, six miles distant from Henly Tickle, I caused the people to lay on their oars; and when I saw the flash of the guns, which were fired at a flock of ducks as they passed through the latter, I observed by my watch how long they were in flying abreast of us. The result of very many observations, ascertained the rate of their flight to be ninety miles in an hour."

* * *

The extraordinary elasticity of the down appears from what I have already said of three quarters of an ounce filling a large hat; and Pontoppidan says, that two or three pounds of it, though pressed into a ball, which may be held in the hand, upon being allowed to expand, will fill the foot-covering of a large bed. It is worthy of notice, however, that it is only the down taken from the nests which has this great elasticity, for what is taken from the dead birds is much inferior, being, as Pontoppidan says, "fat, subject to rot, and far from as light as what the female plucks to form a bed for its young." It is on this account that it is prohibited by the laws of Norway to kill the eiders for their down.

The young have been taken from the Farn Islands, in hopes of their becoming domesticated, but all attempts have proved ineffectual; probably for want of proper food, which is said principally to consist of shell-fish.

The native regions of this bird extend from 45° north, to the highest latitudes yet discovered, both in Europe and America; some wandering pairs have been known to breed on the rocky islands beyond Portland, in the district of Mayne, which is, perhaps, the most southern extent of their breeding place. Greenland and Iceland abound with them, and they are numerous on the coast of Labrador. They associate together in flocks, generally in deep water, diving for shell-fish, retiring frequently to the rocky shore to rest themselves, particularly on the approach of a storm. Their flesh is much esteemed by the inhabitants of Greenland, but tastes strongly of fish. Wilson says, that several attempts have been made to domesticate them, but hitherto without effect.—*Bewick—Von Troil—Montagu.*

Elk, *s.* A large and stately animal of the stag kind.

Ell, *s.* A measure containing a yard and a quarter.

Elm, *s.* The name of a tree.

Elops, *s. obs.* A fish, reckoned by Milton among the serpents.

EMACIATE, *v.* To lose flesh, to pine.

EMBROCATION, *s.* The act of rubbing any part diseased with medicinal liquors; the lotion with which any diseased part is washed.

Embrocations are of a stimulating nature, and are greatly assisted by friction. Of this kind are opodeldoc, soap liniment, &c.

MUSTARD EMBROCATION.

For inflammation of the Lungs.

Flour of mustard . .	4 oz.
Liquid ammonia . .	1½ oz.
Oil of turpentine . .	1 oz.

Water, a sufficient quantity to bring it to the consistence of cream. Flour of mustard mixed into a thin paste with water only is a powerful stimulant, and may be employed with good effect in cases of internal inflammation either of the bowels or lungs.

EMBROCATIONS.

For hard indolent Tumours.

No. 1. Olive oil	4 oz.
Camphor	4 dr.—Mix.
2. Mercurial ointment . . .	2 oz.
Olive oil and camphor, of each.	2 dr.

Embrocations of a more stimulating kind are sometimes employed in swellings of the joints, old strains or other local affections, such as soap liniment with liquid ammonia, olive oil, oil of turpentine, and liquid ammonia, but blisters in such cases are generally more effectual.

Embrocations are often improperly employed, as in recent strains, or inflamed tumours, and other cases where emollient or cooling applications are required. Both strains and bruises are, at first, attended with a degree of inflammation, proportionate to the violence of the injury, and the susceptibility of the injured part; therefore they require, at first, such treatment as is calculated to subdue inflammation, that is, bleeding and purging with a suitable diet, and in strains, rest. The local or topical remedies in the inflammatory stage, are poultices, but in these cases bleeding and purging, immediately after their occurrence, are an essential part of the treatment.—*White.*

EMERY, *s.* An iron ore, useful in cleaning and polishing steel.

EMMET, *s.* An ant, a pismire.

EMOLLIENT, *a.* Softening, suppling.

EMOLLIENTS, *s.* Such things as sheathe and soften the asperities of the humours, and relax and supple the solids. *Vide* POULTICE and FOMENTATION.

EMULSION, *s.* A form of medicine, by bruising oily seeds and kernels.

Emulsions are pectoral medicines, generally mixtures of oil and water, by the intervention of an alkali or mucilage, given alone in coughs.

SIMPLE EMULSION.

Salad oil . .	2 oz.
Clarified honey .	3 oz.
Soft water . .	1 pint
Sub-carbonate of potash	2 dr.—Mix.

PECTORAL EMULSION.

Camphor . .	1 to 2 dr.

To be rubbed into a powder by means of a few drops of spirit of wine.

Oil of aniseed	12 to 15 drops.

To this mix gradually from 12 oz. to a pint of the simple emulsion. Nitrate of potash and tincture of opium are added in irritability of the bladder.—*White.*

ENTER, *v.* To initiate in a business, method, or society.

To enter hounds.—The first thing to be attended to in young dogs of all kinds is to make them understand their name well, and answer to it, before training; for which they should be rewarded and caressed. After fox-hounds have learned to follow freely, they should be coupled, and led out among sheep, deer, &c., and made to understand that such is not their game; but two dogs should never be coupled together, as they are sure to quarrel. A few at a time should be let loose amongst sheep, and if they attempt to run after them, should be severely chastised, and the cry of *ware sheep* be often repeated to them; which cry will, generally, on future occasions, have the effect of stopping them from sheep-running, without the necessity of using the whip. Great care is necessary at the offset to prevent them from worrying a sheep, which they will sometimes do under the management of careless trainers; for if they be allowed to taste the blood, it will be very difficult afterwards to break them from this bad habit.

Young hounds should be often walked about the courts of the kennel, followed by the whipper in, who should rate them after

the huntsman. They should also be frequently taken out with people on foot, which teaches them to be more tractable and attentive, and much more manageable. It is better to take them out to their walks in a country where they are to be hunted; as the sooner they acquire a knowledge of it the better; and when they are thrown out, or left behind, are more likely to find their way home.

In entering fox-hounds it should always be at their own game; although some are foolish enough to begin them with hares, which just requires a second training to break them from that pursuit. Nothing is so good for rendering young hounds obedient as walking them frequently out amongst sheep, hares, and deer, and restraining their pursuit of these animals. This probation will teach them to be steady. A fox-cub should then be turned out before them, in the company of some old hounds as leaders, which train them in a short time instinctively, as it were, to hunt themselves. After they have tasted blood, it will be more difficult to repress their ardour than to excite it. Every means of encouraging them should be used in the earlier stages of their training, and punishment only administered after they have made some progress. In flogging a hound for a fault, the whipper-in should use his voice at the same time; this teaches him to know for what he is beaten; and Mr. Daniel suggests the propriety of introducing a live hare into the kennel, and to flog the dogs soundly whenever they attempt to approach her.

To enter Hawks.—While the hawk is *waiting on* at a proper height, his head being turned inwards, a partridge tied to a creance is to be thrown up; and when the hawk has taken it, he must be allowed to eat it on the ground near the falconer, who is to walk round him, and whistle to him as usual.

When this lesson has been repeated three or four times, by throwing up partridges not confined by the creance, the education of the eyess may be considered as completed; and he may be taken into the field to be used in the way that I shall endeavour to describe; but it will be necessary to give him every advantage in his first flights, and to have a live partridge in the bag, ready to be thrown up to him, should he fail in his first attempts to take his game.

I have now described the mode of breaking eyesses, as practised by the falconers; but I am of opinion that it might be better done, and with infinitely less trouble, by using the young hawk, when flying at hack, to feed always on the lure.

He would soon learn to fly to it, when swung round in the air, and would thus be taught to wait on.

The falconer should kneel down to the hawk, when he is feeding on the lure, and give him meat from the hand, by which means he may not only be made tame, but may be prevented from carrying.

When the season for hawking is at hand, a few live partridges should be thrown up to him, and he should be allowed to eat them near the falconer.

I have no doubt but by this treatment a young hawk would be fit for use as soon as he was taken up, and that nothing more would be required than to accustom him to *stand to the hood.*—*Brown*—*Sebright.*

ENTERING, *s.* Entrance, passage into a place.

ENTIRE, *a.* Whole, undivided; complete in its parts. ENTIRE HORSE: a stallion.

E O, *s.* A game.

An E O table is circular in form, but of no exact dimensions, though in general about four feet in diameter. The extreme circumference is a kind of counter or depôt for the stakes, marked all round with the letters E and O; on which each adventurer places money according to his inclination. The interior part of the table consists first, of a kind of gallery, or rolling-place, for the ball, which, with the outward parts, above called depôt or counter, is stationary or fixed. The most interior part moves upon an axis, or pivot, and is turned about with handles, while the ball is set in motion round the gallery. This part is generally divided into forty niches or interstices, twenty of which are marked with the letter E, and the other twenty with the letter O. The lodging of the ball in any of the niches, distinguished by those letters, determines the wager. The proprietors of the tables have two bar holes, and are obliged to take all bets offered either for E or O; but if the ball fall into either of the bar holes, they win all the bets upon the opposite letter, and do not pay to that in which it falls; an advantage in the proportion of two to forty, or five per cent in their favour.—*Hoyle.*

EPHEMERA, *s.* An insect that lives only one day.

EPIDEMIC, *s.* That which falls at once upon great numbers of people, as a plague; generally prevailing, affecting great numbers of men or animals.

Epilepsy, *s.* A convulsive motion of the whole body, or some of its parts, with a loss of sense. *Vide* Blaine, White, Percivall.

Equestrian, *a.* Appearing on horseback; skilled in horsemanship; belonging to a horse.

Equerry, *s.* Master of the horse.

Equipage, *s.* Furniture for a horseman; carriage, vehicle; attendance, retinue; accoutrements, furniture.

Equipoise, *s.* Equality of weight, equilibration.

Ergot, *s.* A sort of stub, like a piece of horn, placed behind and below the pastern joint.

Errhines, *s.* Powders which cause sneezing, by being blown up the nostrils. They are composed generally of hellebore, snuff, asarabacca, or turbith mineral.

Erysipelas, *s.* An eruption of a hot acrid humour.

Eschar, *s.* A hard crust or scar made by hot applications.

Escharotic, *a.* Caustic, having the power to sear or burn the flesh.

Escharotics are generally in the form of powder. Such are nitric oxide of mercury (red precipitate), exsiccated sulphate of alumine (burnt alum), acetate of copper (crystallised verdigris), sulphate of copper (blue vitriol). These are applied, either separately, or two or more of them are mixed together, and finely powdered; sometimes they are mixed with bole armeniac or chalk, by which they are rendered milder, or with lard or digestive ointment.

ESCHAROTIC POWDERS.

No. 1.	Exsiccated or burnt alum	2 dr.
	Nitric oxide of mercury	½ oz.—Mix.
No. 2.	Sulphate of copper .	1 oz.
	Bole Armeniac . .	1 oz.—Mix.
No. 3.	Acetate of copper .	1 oz.
	Burnt alum . .	2 dr.—Mix.

See Caustics, Astringents, Digestives, and Detergents.

ESCHAROTIC LINIMENT.

Honey . . .	8 oz.
Muriatic acid . .	1 oz.
Verdigris . .	1 oz.

Mix over a slow fire.

This liniment may be made stronger by substituting nitrous acid for muriatic, or by retaining the muriatic, and substituting for the verdigris one drachm of sublimate. A weaker liniment is made, and a very useful one, by using two ounces of vinegar instead of the muriatic acid. (See Egyptiacum). Escharotics are applied to foul ulcers, and are employed to destroy fungous or proud flesh.—*White.*

Esculent, *s.* Something fit for food.

Essence, *s.* In medicine, the chief properties or virtues of any simple, or composition, collected into a narrow compass. *Essence of mustard*, composed of camphor, oil of rosemary, and oil of turpentine, is a good stimulating embrocation.

Essential, *a.* Necessary; important in the highest degree, principal; pure, highly rectified. *Essential oils* are obtained by distillation from mint, pennyroyal, peppermint, lavender, caraway seeds, anise-seeds, juniper berries, lemon-peel, sandal-wood, &c.

Estrapade, *s. obs.* The defence of a horse that will not obey, but rises before, and yerks furiously with his hind legs.

Estuary, *s.* An arm of the sea; the mouth of a lake or river in which the tide ebbs and flows.

Ether, *s.* An element more fine and subtile than air; a chemical preparation. Sulphuric ether is a powerful stimulant, and must be given with caution. White mentions an instance of two ounces destroying a horse.

Ethiop's Mineral, *s.* A preparation made by rubbing equal parts of quicksilver and flower of sulphur together, until the mixture becomes black, and the quicksilver invisible.

Ethiop's mineral, though generally considered as an inert medicine, is possessed of considerable virtue, and is probably the best mercurial in cases where it is necessary to introduce mercury into the circulation, as in farcy, glanders, obstinate mange, &c. It should be given in a dose of two or three drachms in the horse's corn, once or twice a day, until an offensive smell is perceived in the horse's breath, or he is found to stale more than usual; these symptoms indicate that the mercury has got into the circulation. The disorder for which it is given may, at this period, be expected to yield to the mercurial influence, and may not require a further continuance of the medicine.—*White.*

Euphorbium, *s.* A plant; a gum resin that exudes spontaneously from a large oriental tree.

Euphorbium is brought to us in small drops, of a pale yellow colour, which are generally mixed with woody and other extraneous matter. It is used as an external application, and generally employed in the form of tincture; sometimes it is mixed into an ointment with hog's-lard, mercurial ointment, oil of origanum, oil of bay, &c., being previously reduced to a fine powder. It is also frequently an ingredient in strong blisters, to which it proves a powerful auxiliary. In whatever form euphorbium is employed, it proves extremely acrimonious and stimulating, and is useful in reducing callous swellings of the back sinews, curbs, windgalls, &c.

The tincture is made by steeping one ounce of the powder in four or six ounces of rectified or proof spirit, frequently shaking the bottle which contains the mixture, and keeping it in a warm place; after eight or ten days to be strained off, and kept well corked. —*White.*

Ewe, *s.* The she sheep.

Exfoliation, *s.* The process by which the corrupted part of the bone separates from the sound.

Expectoration, *s.* The act of discharging from the breast; the discharge which is made by coughing.

Expectorants, *s.* Medicines that increase the discharge of mucus, and thus relieve coughs and impeded breathing. In costive cases they should be assisted by clysters and bran mashes.

EXPECTORANT BALLS.

1. Gum ammoniacum . 2 to 4 dr.
   Powdered squill . 1 to 2 dr.
   Castile soap . . 3 dr.
   Oil of aniseed . . 30 drops.
   Ginger . . 1 dr.
   Syrup enough to form a ball.

2. Gum ammoniacum . 2 oz.
   Powdered squills . 1 oz.
   Powdered ipecacuana . ½ oz.
   Powdered opium . ½ oz.
   Powdered ginger . 1 oz.
   Powdered allspice . 1 oz.
   Oil of aniseed . ½ oz.
   Balsam of sulphur . 4 oz.
   Castile soap, softened by being beaten up with a little syrup . 2 oz.

To be beaten into a mass fit for making balls. The dose from one ounce to one ounce and a half daily, or twice a day.

3. Barbadoes aloes . 1 dr.
   Assafœtida . . 1 dr.

Liquorice powder and syrup enough to form the ball. One to be given daily until the bowels are a little opened, or the cough is cured.

4. Gum ammoniacum . 2 dr.
   Powdered squills . 1 dr.
   Ipecacuana . . ½ dr.
   Castile soap . . 2 dr.

Syrup and liquorice powder enough to form the ball. One to be given daily, or twice a day.

Dr. Paris, in his Pharmacologia, remarks, that more is to be gained by the combination of these remedies, than can be obtained by any of them separately.

DRENCH.

Garlic bruised	4 oz.
Boiling vinegar	12 oz.

Macerate near the fire three or four hours, then press out the fluid part, and mix with it six ounces of honey. This is sufficient for two doses, and may be given morning and evening. It cannot, perhaps, be too often repeated, that, unless the horse's diet is carefully attended to, medicine will avail but little, either in chronic cough or imperfect wind.—*White.*

Explode, *v.* To drive out with noise and violence.

Explosion, *s.* The act of driving out anything with noise and violence.

In January, 1809, Mr. Sayers, of Cuckfield, was reloading his fowling-piece; the powder ignited (supposed from a latent spark left by the paper wadding in the barrel), and drove the powder flask, which was copper, to a considerable height in the air, and shattered it to atoms. Mr. Sayers luckily escaped with no injury, except a slight scratch on his fingers. Accidents similar to the above may be effectually prevented by using pieces of pasteboard, felt, or leather, to charge, with instead of soft paper.—*Daniel.*

Extensor, *s.* The muscle by which any limb is extended.

Extirpation, *s.* The act of rooting out, excision.

Extract, *v.* To draw out of something; to draw by chemical operation.

Exuviæ, *s.* Cast skin, cast shells; whatever is shed or cast off by animals.

Eyas, *s.* A young hawk just taken from the nest. *Vide* Hawk.

Eyasmusket, *s. obs.* A young unfledged male musket hawk.

Eye, *s.* The organ of vision; any thing formed like an eye; any small perforation; a small catch into which a hook goes; bud of a plant.

Eye, *v.* To watch, to keep in view.

Eyeball, *s.* The apple of the eye.

Eyesore, *s.* Something offensive to the sight.

Eyespotted, *a.* Marked with spots like eyes.

Eyetooth, *s.* The tooth on the upper jaw next on each side to the grinders, the fang.

Eyewater, *s.*

No. 1.	Super-acetate of lead (sugar of lead)	2 dr.
	Vinegar	2 to 4 oz.
	Soft water	14 oz.
	Mix.	
No. 2.	Sulphate of zinc	1½ dr.
	Diluted sulphuric acid	½ dr.
	Water	1½ pint.
3.	Super-acetate of lead	2 dr.
	Sulphate of zinc	5 scrup.
	Water	1 pint.

Mix and strain through blotting paper.

In severe attacks of inflammation of the eye, it is often in so irritable a state as to admit only of the application of warm water, or milk and water; then dilute either of the above eye waters with an equal quantity of warm water; but when the inflammation has abated, they may be made stronger, and applied cold. Should the above formulæ be found ineffectual, let one, two, or three ounces of tincture of opium be added, or a larger proportion of vinegar to No. 1 than is directed. The vinous tincture of opium (*vinum opii*), undiluted, has often done good, applied by means of a small camel hair pencil brush, or squeezed into the inner corner of the eye, by means of a small bit of clean sponge. A solution of the extract of belladonna, in white wine, or diluted spirit, may also be tried. *Vide* Blaine, Percivall, and White.

Eyre, *s. obs.* In Forestry, the court of justice itinerant.

Eyry, *s.* The place where birds of prey build their nests and hatch. *Vide* Aërie.

THE FALCON.

FALCO, (LINN.), *s.* A genus thus characterised :—

Head covered with feathers, bill strong, short, generally bending from its base, which is covered with a naked and coloured cere. Nostrils round or oval, lateral, and placed in the cere. Tongue in most species fleshy and divided by a slit. Upper orbit of the eye projecting. Legs feathered to the toes, or naked. Toes three forwards and one behind, the middle toe connected with the outer one, as far as the first joint. Claws short and very hooked, strong and retractile. Female superior in size to the male.—*Montagu.*

FALCON, *s.* A hawk trained for sport; a bird of immense flight. *Vide* HAWK.

It is recorded, that a falcon belonging to a Duke of Cleves, flew out of Westphalia into Prussia in one day; and in the county of Norfolk, a hawk has made a flight at a woodcock near thirty miles in an hour.

But what are these compared to the actual velocity and continuance of the flight of a falcon, that is recorded to have belonged to Henry IV., King of France, which escaped from Fontainbleau, and in twenty-four hours after was found in Malta, a space computed to be not less than 1350 miles? a velocity equal to fifty-seven miles an hour, supposing the hawk to have been on wing the whole time. But as such birds never fly by night, and allowing the day to be at the longest, or to be eighteen hours light, this would make seventy-five miles an hour. It is probable, however, that he neither had so many hours of light in the twenty-four to perform the journey, nor that he was retaken the moment of his arrival, so that we may fairly conclude much less time was occupied in performing that distant flight.—*Vide* FLIGHT OF BIRDS.

FALCONER, *s.* One who breeds and trains hawks.

The village of Falconswaerd, near Bois le Duc, in Holland, has for many years furnished falconers to the rest of Europe. I have known many falconers in England, and in the service of different princes on the Continent, but I never met with one of them who was not a native of Falconswaerd.

It has been the practice of these sober and industrious men to stay with their employers during the season for hawking, and to pass the remainder of the year with their families at home. * * *

A falconer, whose province it was to tame, manage, and look after falcons and other hawks, was formerly as great and conspicuous a character as the most celebrated huntsman of the present day. The influence of fashion and the changes wrought by time have, however, so obscured both sport and sportsmen in this way, that neither hawk, falcon, or falconer, are to be seen or heard of, unless in the northern parts of the kingdom, where it is also nearly buried in oblivion.—*Sebright*—*Daniel*.

FALCONRY, *s.* *Vide* HAWKING.

FALLOW, *a.* Pale red, or pale yellow; unsowed, left to rest after the years of tillage; ploughed, but not sowed; unploughed, uncultivated.

FALLOW DEER, *s.* The domestic or park deer.

No two animals can make a more near approach to each other than the stag and the fallow deer, and yet no two animals keep more distinct, or avoid each other with more fixed animosity; they never herd or intermix together, and consequently never give rise to an intermediate race. It is even rare, unless they have been transported thither, to find fallow-deer in a country where stags are numerous.

The fallow-deer is easily tamed, and feeds upon many things which the stag refuses; he also preserves his venison better: nor does it appear that the rutting, followed by a long and severe winter, exhausts him, but he continues nearly in the same state throughout the year. He browses closer than the stag, for which reason he is more prejudicial to young trees, and often strips them too close for recovery. The young deer eat faster and with more avidity than the old. At the second year they seek the female, and, like the stag, are fond of variety. The doe goes with young eight months and some days; she commonly produces one fawn, sometimes two, but very rarely three. They are capable of engendering, from the age of two years to that of fifteen or sixteen; and in short they resemble the stag in all his natural habits, and the greatest difference between them is the duration of their lives. From the testimony of hunters it has been remarked, that stags live to the age of thirty-five or forty years, and from the same authority we understand that the fallow-deer does not live more than twenty. As they are smaller than the stag, it is probable that their growth is sooner completed.

* * *

If some curious gentleman would procure the head of a fallow-deer, and have it dissected, he would find it furnished with two spiracula, or breathing places, besides the nostrils; probably analogous to the *puncta lachrymalia* in the human head. When deer are thirsty they plunge their noses, like some horses, very deep under water while in the act of drinking, and continue them in that

situation for a considerable time; but, to obviate any inconveniency, they can open two vents, one at the inner corner of each eye, having a communication with the nose. Here seems to be an extraordinary provision of nature worthy our attention; and which has not, that I know of, been noticed by any naturalist. For it looks as if these creatures would not be suffocated, though both their mouths and nostrils were stopped. This curious formation of the head may be of singular service to beasts of chase, by affording them free respiration: and no doubt these additional nostrils are thrown open when they are hard run.—*Buffon—White's Selborne.*

False Quarter, *s.*

False Quarter is a defect in the hoof of a horse, originally occasioned by some injury producing a destruction of parts, as quitter, canker, wounds, treads, bruises, or such formation of matter by which a part of the hoof has been unavoidably destroyed, or necessarily taken away. In the regeneration of parts, the incarnation (from the rigid and horny nature of the hoof) is irregular and imperfect, forming a sort of cleft (or artificial union) with the sound part upon the surface, productive of a sensible weakness underneath. This imperfect and defective junction renders such quarter, as it is called, inadequate to the weight it is destined to bear; in which case much judgment is required, and may be exerted, in the palliation, as perfect cure is not to be expected. Care must be taken in forming the shoe to relieve the tender part from the pressure, by hollowing it at that particular spot, and letting the bearing be fixed entirely upon the sound parts. By constant attention in reducing the prominent edges of the irregular projection with the fine side of the rasp, and a few occasional impregnations with fine spermaceti oil, the hoof may be sometimes restored to its original formation.—*Taplin.*

Farcy, *s.* The leprosy of horses.

Farcy is intimately connected with glanders; they will run into each other, or their symptoms will mingle together, and before either arrives at its fatal termination its associate will almost invariably appear. An animal inoculated with the matter of farcy will often be afflicted with glanders, while the matter of glanders will frequently produce farcy. They are different types or stages of the same disease. There is, however, a very material difference in their symptoms and progress, and this most important of all, that while glanders are generally incurable, farcy, in its early stage and mild form, may be successfully treated.

Veterinary writers tell us that it is a disease of the absorbents in the skin, and therefore the first indication of this disease, even before any drooping, or loss of condition, or of appetite, is generally the appearance of little tumours—*farcy buds*—close to some of the veins, following the course of the veins, and connected together by a kind of cord, which farriers call *corded veins.* When they are few and small they may possibly exist for several weeks without being observed; but at length they increase in number and in size, and become painful and hot, and some of them begin to ulcerate. They appear usually about the face or neck, or inside of the thigh, and in the latter case there is some general enlargement of the limb, and lameness.

In some cases, however, the horse will droop for many a day before the appearance of the *buttons* or *farcy buds;* his appetite will be impaired;—his coat will stare;—he will lose flesh. The poison is evidently at work, but has not gained sufficient power to cause the absorbents to swell. In a few instances these buds do not ulcerate, but become hard and difficult to disperse. The progress of the disease is then suspended, and possibly for many months the horse will appear to be restored to health; but he bears the seeds of the malady about him, and, all at once, the farcy assumes a virulent form, and hurries him off. These buds have sometimes been confounded with the little tumours, or lumps of *surfeit.* They are generally higher than these tumours; not so broad; have a more knotty feel, and are principally found on the inside of the limbs, instead of the outside.

Few things are more unlike, or more perplexing, than the different forms which farcy assumes at different times. One of the legs, and particularly one of the hinder legs, will suddenly swell to an enormous size. At night the horse will appear to be perfectly well, and, in the morning, one leg will be three times the size of the other, with considerable fever, and scarcely the power of moving the limb.

At other times the head will be subject to this enlargement—the muzzle will particularly swell, and a stinking discharge will issue from the nose. Sometimes the horse will gradually lose flesh and strength; he will be hide-bound—mangy eruptions will appear in different parts; the legs will swell; cracks will appear at the heels, and the inexperienced person may conceive it to be a mere want of condition combined with grease.

Farcy, like glanders, springs from infection, or from bad stable management. It is produced by all the causes which give rise to glanders; but with this difference, that it is more frequently generated, and is sometimes strangely prevalent in particular districts.

The treatment of farcy varies with the form it assumes. In the button or bud farcy, a mild dose of physic should be first administered. The buds should be then carefully examined, and if any of them have broken, the budding iron, of a dull red heat, should be applied to them; or if matter should be felt in them, showing that they are disposed to break, they should be penetrated with the iron. These wounds should be daily inspected, and if, when the slough of the cautery comes off, they look pale, and foul, and spongy, and discharge a thin matter, they should be frequently washed with a lotion, composed of a drachm of corrosive sublimate dissolved in an ounce of rectified spirit; the other buds should likewise be examined, and opened with the iron as soon as they evidently contain matter. When the wounds begin to look red, and the bottom of them is even and firm, and they discharge a thick white or yellow matter, the friar's balsam will speedily heal them. As, however, the constitution is now tainted, local applications will not be sufficient, and the disease must be attacked by internal medicines, as soon as the physic has ceased to operate. The corrosive sublimate will be the best alterative, and may be given in doses of ten grains, gradually increased to a scruple, with two drachms of gentian and one of ginger, and repeated morning and night until the ulcers disappear, unless the horse is violently purged, or the mouth becomes sore, when a drachm of blue vitriol may be substituted for the corrosive sublimate. During this, the animal should be placed in a large box, with a free circulation of air; and green meat, or carrots, the latter more particularly, should be given him, with a fair allowance of corn. If he could be turned out during the day, it would be advantageous; but at all events he should be daily exercised. It is related by Mr. Blaine, that a horse so reduced as not to be able to stand, was drawn into a field of tares, and suffered to take his chance: the consequence was, that when he had eaten all within his reach, he was able to rise and search for more, and eventually recovered. In an early stage of the disease, and if glanders have not appeared, this treatment will frequently succeed. If, after the wounds have healed, the absorbents should continue to be corded, a blister, or light firing, will probably be serviceable.—*The Horse.*

Fault, *s.* Offence; defect; puzzle, difficulty; a term in hunting.

Favourite, *s.* A person or thing beloved. In racing, the term is used to express supposed superiority, as "first favourite for the Leger."

Fawn, *s.* A young deer.

Fawn, *v.* To bring forth a young deer; to court by frisking before one as a dog.

Feather, *s.* The plume of birds; upon a horse, a sort of natural frizzling hair.

At the root of the first quill in each wing of the woodcock, is a small pointed narrow feather, very elastic, and much sought after by painters, by whom it is used as a pencil. A feather of a similar kind is found in the whole of this tribe, and also in every one of the tringas and plovers which the author has examined.—*Bewick.*

Feather, *v.* To dress in feathers; to fit with feathers; to tread as a cock; to strike feathers from a bird fired at.

Febrifuge, *s.* Any medicine serviceable in fever. *Vide* Fever.

Feed, *v.* To supply with food; to graze; to consume by cattle; to take food; to prey.

Feed, *s.* Food, that which is eaten; a certain portion of corn given to a horse.

Feeder, *s.* One that gives food; one that eats; a kennel servant.

Feeler, *s.* One that feels; the horns or antennæ of insects.

Feet, *s.* The plural of foot.

Feet of Birds.—Technical terms:—

Pinnatus.—Finfooted or scalloped, a term applied to the feet of coots.

Pes lobatus.—Applied when the toes are

furnished with broad plain membranes, as in the foot of the red-necked grebe.

Semi-palmatus—Semi-palmated: when the middle of the webs reach only about half the length of the toes.

When the middle toe claw is notched like a saw, it is called *serrated;* and *pectinated* when toothed like a comb.

* * *

The large crooked talons of birds of prey, and their hooked beaks, are well formed for securing and tearing their victims. The formation of the feet of the woodpeckers, the toes being placed two forward and two backward, is well calculated for climbing, and the cuneiform shape of the extremity of their bills is suited to the purpose of cutting holes in decayed trees; their tongue is also wonderfully contrived to search out insects beyond the reach of their bill, by its great length, which is double that of the tongue at least. The wryneck has this singularity, as well as the like formation of toes; which last is also found in the cuckoo: but neither of these birds is seen to climb up the bodies of trees, nor have either the stiff sharp-pointed feathers in the tail, as in the woodpecker, so admirably adapted to support them when in the act of hewing. This agrees with the observations of an ingenious living naturalist, the Rev. Revett Shepherd. "The cuckoo," says he, "is furnished with two toes before and two behind, and yet is never known actually to climb, a convincing proof that such conformation does not necessarily bring with it the power of climbing, more especially when we consider that the nuthatch (*Sitta Europæa*), and the creeper (*Certhia familiaris*), have their toes placed in the usual manner, and yet run up and down trees with as much facility as the woodpeckers. The use of the *pedes scansorii*, as they evidently in this case conduce not to climbing, I judge to be this; it is well known that this bird will oftentimes sit by the half-hour together on the bough of a tree, vociferating its loud and pleasing note; in doing this, it sits remarkably forward, and appears in constant agitation, continually moving its body up and down with great elegance; now, as it sits so forward, while using this exertion, it would be liable to lose its balance and quit its hold, had it only one toe behind; whereas, by the contrivance of two, it is enabled strongly to adhere to the branch.

The legs and feet of aquatic birds are wonderfully formed for accelerating their motion in that element, which is their greatest security. The bone of the leg is sharp, and vastly compressed sideways: the toes, when the foot is brought forward, close in behind each other in such a manner as to expose a very small surface in front, so that, in the action of swimming, very little velocity is lost in bringing the legs forward; this is very conspicuous in the diver. Some aquatic birds are web-footed before the whole length of the toes, as in the ducks; others only half the length of the toes, like the avoset. Some again have all four toes webbed, as in the cormorant; others whose feet are furnished with a fin-like membrane on each side of the toes; these are either plain, as in the grebe, or lobed, as in the coot and phalarope. There are also some who swim and dive well, whose toes are long and slender, and not furnished with webs or fins, such as the water-hen and rail; but these live as much on land as in water. The gulls and terns, although web-footed, seem incapable of diving; the latter, indeed, we never observed to settle on the water; the former is so buoyant that it floats elegantly on the surface. The avoset, whose feet bespeak it an inhabitant of the water, does not seem to have the power of swimming; the water-ouzel, on the other hand, has not the least appearance of an aquatic, nor can it swim; but it will dive, and remain a long time under water. The serrated claw in the heron and nightjar is a singular structure, which we have not discovered the use of. The bill as well as the feet of birds, makes one of the strong natural divisions; but these are described under the head of each genus.

* * *

Of Horses.—Contraction is the most general evil among the feet of our horses, and some breeds appear more liable to it than others: it is peculiarly the case with blood-horses. Colour also seems to have some influence in contracting the feet; hence I have observed dark chestnuts particularly prone to it. A good foot should exhibit a proper line of obliquity: when the horn is very upright, however wide and open the heels, such feet soon become defective. This is but seldom attended to, even among those who esteem themselves judges; but no rule admits of fewer exceptions, than that such a foot soon becomes faulty. There should also be a proper height of horn: when there is too much, it disposes to contraction: when too little, the heels, quarters, and soles must, of necessity, be weak, and tenderness in going must be the consequence.

The *heels* should be particularly attended to; they must be wide, and the frog healthy, firm, yet pliable and elastic. Contraction of their cleft is their most common defect, and is frequently accompanied with a general lessening of the circumference of the foot. Such a foot will probably feel hotter than natural; the frog also will be compressed and small, and very likely thrushy.

When a horse's foot is held up, the sole

should present a concave surface: if it be less concave than natural, that sole is weak, and will not bear much pressnre; and it is more than probable it will continue lessening in concavity until it becomes a plane, when every subsequent shoeing will endanger the laming of the animal. *White feet* are very objectionable on this account, for they are particularly liable to become flat in the sole: their quarters, also, are commonly weak, and fall in; and when neither of these evils take place, they yet have seldom strength enough to resist contraction: and it may be determined on, that, when there are three dark and one white foot, in nineteen instances out of twenty, the white foot becomes defective sooner than the dark ones.

Another very serious complaint is a brittleness of hoof, which may be generally be detected by the marks of the fragile parts detaching themselves from every old nail-hole. This kind of foot, particularly in hot weather, breaks away, till there is no room for the nails to hold, when the horse, of course, becomes useless. In an examination of the foot, the eye should also be directed to the wearing of the shoe: if it be unequally worn, particularly if the toe be worn down, such a horse is probably a stumbler, and does not set his foot evenly on the ground, either from defective feet or natural gait.

* * *

The feet of horses being the very basis of support, upon which the safety and expedition of the frame entirely depends, they are entitled to every possible degree of care and attention; more particularly in the winter season, when, from neglect, so many ills and inconveniences are known to arise. The injuries, accidents, and diseases, to which the feet are constantly liable, consist of cracks in the heels, scratches or lacerations, stubs and bruises of the outer sole, or upon the verge of the coronet between hair and hoof, corns, sandcracks, thrushes, canker, quitter, ringbone, and footfounder; exclusive of the frequent injuries sustained in shoeing, by the ignorance, indolence, or obstinacy of those smiths who, having no professional reputation to support, are too innately confident in their own ability to bear instruction.

As the defects thus enumerated will be found individually enlarged upon under distinct and separate heads, it becomes only necessary here to lay down such general rules for the regular management of the feet, as may (properly attended to) prove the means of prudent prevention; not more in respect to the trouble and expense of disease, than of the most mortifying and repentant anxiety. These defects and disquietudes are seldom found but in the stables where the master rarely or ever condescends to obtrude his person and commands upon the tenacious dignity of a self-important groom; the preserving industry of whose careful endeavours, and the pliability and elasticity of whose joints, if properly exerted, would prove the truest and most infallible preventive of swelled legs and cracked heels, in preference to all the nostrums ever yet brought into private practice or public use. And those who unfortunately encounter these ills, may generally, and with justice, attribute them much more to the constitutional tardiness of the professed groom (or occasional strapper) than any defect in the constitution of the horse.

The feet of different horses vary exceedingly in what may be termed the texture or property of the hoof, and this is in general regulated by the colour of the legs and feet. There are few horses with white heels but what have white hoofs also; and these are always more liable to, and susceptible of, defects and weakness, than those of an opposite description. The sound, firm, dark-coloured hoof of the bay, brown, or black horse, is seldom found defective; but those of other coloured horses are most subject to weak, thin soles, displaying a prominence on each side the frog occasioned by a too feeble and inadequate resistance to the force of the membranous mass within; feet of which description are also frequently found to have the corresponding concomitant of a brittle hoof, the edges of which are incessantly splitting, and throwing out a constant threatening of sandcracks, with the additional mortification of being subject to inveterate thrushes, or an almost constantly diseased or putrefied state of the frog.

Feet so exceedingly different in the nature of their construction, must certainly require as different a mode of treatment, according to such circumstances as happen to exist. To preserve feet perfectly sound, and free from the ills to which they are subject, cleanliness is the leading step. After exercise or use, so soon as the body is drest, the dirt or gravel should be carefully taken from under the shoes with a picker, the feet well washed, the legs and heels rubbed dry, the bottom stopped with cow-dung, and the hoofs oiled with a brush impregnated with spermaceti oil. Horses left with wet legs and heels after a severe chase, or long journey, particularly in sharp easterly winds, or during frost and snow, constitute cracks or scratches to a certainty. So severe a regidity is occasioned in the very texture of the integument, and it becomes partially ruptured or broken in various places, upon being brought into expeditious action; which, with the friction and irritation then occasioned by the sharp particles of gravel in dirty roads, soon produce lacerations of the most painful description.

The state of the shoes should be constantly attended to. Permitted to remain too long upon the feet, the growth of the hoof brings the shoe forward, rendering it too short at the heel, when it begins to indent, and sinking upon the foot, soon presses upon the outer sole, constituting pain or disquietude in some horses, laying the foundation of corns in others. Horses in moderate work require new shoes once a month upon an average, never varying more than two or three days from that time: indeed, it is not right that they should go longer. The penurious plan of removing shoes half worn, is truly ridiculous; they never render service adequate to the expense, and the practice only tends to a more frequent destruction of the hoof. Thrushes should be counteracted upon their first appearance, without being permitted to acquire a corroding virulence. Swelled legs are hardly ever seen in stables where a proper course of discipline and regular routine of business is observed; they proceed from a viscid, sizy state of the blood, a languor in the circulation, a want of exercise out of the stable, or a sufficiency of friction, leg-rubbing, care, and attention within.

* * *

Pointers' and setters' feet, particularly the former, are frequently chafed; their feet should always, after being hunted, be thoroughly washed with salt and water, and, half an hour afterwards, be well rubbed with hog's-lard.—*Montagu—Blaine—Taplin—Thornhill.*

Feline, *a.* Like a cat, pertaining to a cat.

Fell, *s.* The skin, the hide.

Felloe, *s.* The circumference of a wheel.

Fellow, *s.* An associate, one united in the same affair; one of the same kind or litter.

Felt, *s.* Cloth made of wool united without weaving; a hide or skin.

Female, *s.* A she, one of the sex which brings young.

Femoral, *a.* Belonging to the thigh.

Fen, *s.* A marsh, flat and moist ground, a moor, a bog.

Fenberry, *s.* A kind of blackberry.

Fence, *s.* Guard, security; enclosure, mound, hedge.

Fencer, *s.* One who teaches or practises the use of weapons; a horse that leaps.

Ferine, *a.* Wild, savage.

Fermentation, *s.* A slow motion of the intestine particles of a mixed body, arising usually from the operation of some active acid matter.

Fern, *s.* A plant.

Ferny, *a.* Overgrown with fern.

Ferret, *s.* A quadruped of the weasel kind, used to catch rabbits.

Ferret, *v.* To drive out of lurking places; to hunt rabbits with a ferret.

Fetlock, *s.* A tuft of hair that grows behind the pastern joint.

Fetter, *s.* Chains for the feet.

Fever, *s.* A disease in which the body is violently heated, and the pulse quickened, or in which heat and cold prevail by turns. It is sometimes continual, sometimes intermittent.

In horses fever begins frequently with a cold or shivering fit, although this is not essential to fever. The horse is dull, unwilling to move, with a staring coat, and cold legs and feet. This is succeeded by warmth of the body; unequal distribution of warmth to the legs; one hot, and the other three cold, or some unnaturally warm, and others unusually cold, although not the deathy coldness of inflammation of the lungs; the pulse quick, soft, and often indistinct; breathing somewhat laborious; but no cough, or pawing, or looking at the flanks. The animal will scarcely eat, and is very costive. While the state of pure

fever lasts, the shivering fit returns at nearly the same hour every day, and is succeeded by the warm one, and that often by a very slight sweating one; and this goes on for several days until local inflammation appears, or the fever gradually subsides. No horse ever died of pure fever; if he is not destroyed by inflammation of the lungs, or feet, or bowels succeeding to the fever, he gradually recovers.

What we have said of the treatment of local inflammation will sufficiently indicate that which we should recommend in fever. Fever is general increased action of the heart and arteries, and therefore evidently appears the necessity for bleeding, regulating the quantity of blood taken by the degree of fever, and usually continuing to take it (the finger being kept on the artery) until some impression is made upon the system. The bowels should be gently opened; but the danger of inflammation of the lungs, and the uniformly injurious consequence of purgation in that disease, will prevent the administration of an active purgative. One drachm and a half of aloes may be given morning and night with the proper fever medicine, until the bowels are slightly relaxed, after which nothing more of an aperient quality should be administered. Digitalis, emetic tartar, and nitre, should be given morning and night, in proportions regulated by the circumstances of the case, and these should give way to white hellebore in doses of half a drachm twice in the day, if symptoms of inflammation of the lungs should appear. The horse should be warmly clothed, but be placed in a cool and well-ventilated stable.

Symptomatic fever is generally increased arterial action, proceeding from some local cause. No organ of consequence can be long disordered or inflamed without the neighbouring parts being disturbed, and the whole system gradually participating in the disturbance. Inflammation of the feet or of the lungs never existed long to any material extent, without being accompanied by some degree of fever.

The treatment of symptomatic fever should resemble that of simple fever, except that particular attention should be paid to the state of the part originally diseased. If the inflammation which existed there can be subdued, the general disturbance will usually cease.—*Blaine.*

FIBULA, *s.* The outer and lesser bone of the leg, smaller than the tibia.

FIELD, *s.* Ground not inhabited, not built on; cultivated tract of ground; the open country; horsemen collected at a hunt; horses collectively.

FIELDFARE, (*Turdus Pilarus*, LINN.; *La Litorne, ou Tourdelle*, BUFF.) *s.* A bird.

This is somewhat less than the missel-thrush; its length is ten inches. The bill is yellow; each corner of the mouth is furnished with a few black bristly hairs; the eye is light brown; the top of the head and back part of the neck are of a light ash-colour; the former spotted with black; the back and coverts of the wings are of a deep hoary brown; the rump ash-coloured; the throat and breast are yellow, regularly spotted with black; the belly and thighs of a yellowish white; the tail brown, inclining to black; the legs dusky yellowish brown; in young birds yellow.

We have seen a variety of this bird, of which the head and neck were of a yellowish white; the rest of the body was nearly of the same colour, mixed with a few brown feathers; the spots on the breast were faint and indistinct: the quill feathers were perfectly white, except one or two on each side, which were brown; the tail was marked in a similar manner.

The field-fare is only a visitant in this island, making its appearance about the beginning of October, in order to avoid the rigorous winters of the north, whence it sometimes comes in great flocks, according to the severity of the season, and leaves us about the latter end of February or the beginning of March, and retires to Russia, Sweden, Norway, and as far as Siberia and Kamtschatka. Buffon observes that they do not arrive in France till the beginning of December, that they assemble in flocks of two or three thousand, and feed on ripe crevises, of which they are extremely fond; during the winter they feed on haws and other berries; they likewise eat worms, snails, and slugs.

Field-fares seem of a more sociable disposition than the throstles or the missels: they are sometimes seen singly, but in general form very numerous flocks, and fly in a body; and though they often spread themselves through the fields in search of food, they seldom lose sight of each other, but, when alarmed, fly off, and collect together upon the same tree.—*Bewick.*

FIELDMOUSE, *s.* A mouse that burrows in banks.

An extraordinary instance of the rapid increase of mice, and of the injury they sometimes do, occurred a few years ago in the new plantations made by order of the crown in

Dean Forest, Gloucestershire, and in the New Forest, Hampshire. Soon after the formation of these plantations, a sudden and rapid increase of mice took place in them, which threatened destruction to the whole of the young plants. Vast numbers of these were killed,—the mice having eaten through the roots of five-year-old oaks and chestnuts, generally just below the surface of the ground. Hollies also, which were five and six feet high, were barked round the bottom; and in some instances the mice had crawled up the tree, and were seen feeding on the bark of the upper branches.

* * *

The following account will show the numbers of mice caught in the different inclosures in Dean Forest in three months, from September to January, with the number of acres, and the proportion between the long and the short-tailed mice.

	Acres.	Short-tailed Mice.	Long-tailed Mice.	Total.
Haywood Inclosure.	418	12,850	8	12,858
Oiley Hill ditto . .	41	1,161	11	1,172
Crabtree Hill do. .	372	7,851		7,851
Park Hill ditto . .	113	2,665		2,665
Shutcastle ditto . .	163	484	33	517
Sallow Vallets do.	386	1,361		1,361
Barnhill ditto . .	50	70		70
Birchwood ditto .	50	3		3
Whitemead Park do.	100	1,559	15	1,574
Total Acres	1,693	Total Mice,		28,071

I should not forget to mention that, in New Forest, foxes were frequently seen hunting, after the mice, and eating them greedily.—*Jesse.*

FILLY, *s.* A young mare; opposed to a colt or young horse.

FILM, *s.* A pellicle or thin skin.

FILTER, *v.* To clear by drawing off liquor by depending threads; to strain; to percolate.

FIN, *s.* The wing of a fish.

FIN-FOOTED, *a.* Having feet with membranes between the toes.

FINCH (*Fringilla*), *s.* A small bird; of which we have three kinds, the goldfinch, the chaffinch, and bullfinch.

The transition from the bunting to the finch is very easy, and the shade of difference between them, in some instances, almost imperceptible; on which account they have been frequently confounded with each other. The principal difference consists in the beak, which in the finch is conical, very thick at the base, and tapering to a sharp point: in this respect it more nearly resembles the grosbeak. Of this tribe many are distinguished as well for the liveliness of their song, as for the beauty and variety of their plumage, on which accounts they are much esteemed. They are very numerous, and assemble sometimes in immense flocks, feeding on seeds and grain of various kinds, as well as on insects and their eggs.—*Bewick.*

FINGER, *s.* The flexible member of the hand by which men catch and hold; a small measure of extension.

FIR, *s.* The tree of which deal boards are made.

FIRE-ARMS, *s.* Arms which owe their efficacy to fire; guns.

FIRE, *v.* To set on fire; to kindle; to inflame the passions; to discharge any fire-arms.

FIRING, *p.* The application of a red hot iron to the skin, so as to burn without penetrating through it; to cauterise a horse.

The violent inflammation firing occasions, rouses the absorbent vessels into action, by which callous or even bony swellings are sometimes dispersed. The diseases in which it is most efficacious are spavins, ring-bones, and callous swellings about the back sinews, the consequences of strains and windgalls. Firing draws blood to the affected part, thickens and strengthens it, and makes the skin act as a permanent bandage. A blister is often applied to the part immediately after firing, or on the following day, to render it more effectual. It is necessary to observe that the milder remedies should be tried before this severe operation is had recourse to. Firing has been recommended for the purposes of strengthening the back sinews and hocks of colts, to prevent strains, and what is termed breaking-down.

It has been erroneously asserted, that when firing is employed to a callus of the back

sinews, the swelling should be previously reduced by blistering; that firing would then prevent a return; whereas if the firing were performed in the first place, it would fix the swelling, and render it incurable. In inflammation, certainly firing will do harm, therefore it must be first removed by the frequent application of a cooling lotion, such as diluted vinegar, in which a little sugar of lead has been dissolved.—*Percival.*

FIRELOCK, *s.* A soldier's gun; a gun discharged by striking steel with flint.

FISH, *s.* An animal that inhabits the water.

FISH, *v.* To be employed in catching fish.

Fishes in general are male and female; the former possessing the melt and the latter the roe, although some individuals of the cod and sturgeon are said to contain both. The spawn of the greater number of fishes is deposited in the sand or gravel; and in that state, it is probable that the roe and melt are mixed together. A fish whose weight, at twenty years old, shall be thirty pounds, generates the first or second year, when perhaps it does not weigh more than half a pound; and it is certain that the male seems more attached to the eggs than the female, for when she ceases to drop them, the male instantly abandons her, and with ardour follows the eggs which are carried down by the stream, or dispersed amongst the waves by the wind, passing and repassing many times over every spot where he finds the eggs.

Summer is the usual spawning time, because at that season the water is tepified by the beams of the sun, and is therefore better adapted for quickening the eggs into life. How the eggs of fishes are impregnated is wholly unknown. All that obviously offers is, that in ponds, the sexes are often seen together among the long grass at the edge of the water; that there they seem to struggle, and are in a state of suffering, as they grow thin, lose their appetite, whilst their flesh becomes flabby, and in some, the scales grow rough and lose their lustre; on the contrary, when the time of coupling is over, their appetite returns, their natural agility is resumed, and their scales become brilliant and beautiful. The spawn continues in the state of eggs a longer or shorter period, but this is for the most part proportioned to the size of the animal. The young animal remains in the form of an egg from December until April in the salmon kind; the carp not above three weeks, and the gold fish from China is produced in a still less time. With all the advantages of minuteness and agility when excluded from the egg, there is not one, perhaps, of a thousand, that survives the dangers of its youth. Among the spinous fishes there is no trace of parental affection; they abandon their eggs to be hatched by the warmth of the season, and if they ever return to the spot where their young first received life, the parents that gave them birth, become their most formidable enemies.

By the rapacity of one another although the fishes perish by millions, yet they have other destroyers. Many of the quadrupeds and a great proportion of the sea fowls, either feed on fish, are the merciless invaders of the small fry, or devour the spawn. In a savage state, numbers of the human race wander round the lakes and rivers, whence a considerable proportion of their sustenance is derived, and among those nations whom arts and agriculture have rendered less dependent on this precarious support, superstition has usurped the place of want, and given a new edge to their avidity for this species of food; but the munificent Author of nature, notwithstanding the annual consumption of fishes is constant and immense, has made a kind provision for his creatures, in which the glory of his providence is remarkable in a twofold manner. First, by giving fishes at certain fixed seasons of the year, a particular inclination to approach the land; and this always at a time when they are the fattest, and not emaciated by breeding; as the salmon in the spring, mackerel about midsummer, herrings in the autumn, cod in the winter, &c. Secondly, by the amazing fertility which he has conferred on this class of beings. The fecundity of fishes far surpasses that of any other animals; if we should be told of a being so prolific, that it would bring forth in one season as many of its kind as there are inhabitants in England, our surprise would be deeply excited, yet upwards of 9,000,000 of ova have been found in the spawn of a single cod. 1,357,400 have been taken from the belly of a flounder; the mackerel, carp, tench, and a variety of others, are endowed with a fertility but little inferior. Such an astonishing progeny, were it allowed to arrive at maturity, would soon overstock the element allotted them; but their numbers, by the means above-mentioned, are considerably lessened, and thus two important purposes are answered in the economy of nature; by the extraordinary fruitfulness of fishes, amongst a host of foes it preserves the species, and furnishes the rest with an aliment adapted to their nature.

* * *

Fishes are the most voracious animals in nature. Many species prey indiscriminately on everything digestible that comes in their way, and devour not only other species of fishes, but even their own. As a counterbalance to this voracity, they are amazingly prolific. Some bring forth their young alive; others produce eggs. The viviparous blenny brings forth 200 or 300 live fishes at a time. Those which produce eggs are all much more prolific, and seem to proportion their stock to the danger of consumption. Leuwenhoek affirms that the cod spawns above 9,000,000 in a season. The flounder produces above 1,000,000, and the mackerel above 500,000. Scarcely one in a hundred of these eggs, however, is supposed to come to maturity; but two wise purposes are answered by this amazing increase: it preserves the species in the midst of numberless enemies, and serves to furnish the rest with a sustenance adapted to their nature.

* * *

How long a fish, that seems to have scarce any bounds put to its growth, continues to live, is not ascertained; the date prescribed as the age of man, would not perhaps be sufficient to measure the life of the smallest. In the royal ponds at Marli, in France, there are some fishes that have been preserved tame since the time, it is said, of Francis the First, and which have been individually known to the persons who have succeeded to the charge of them, ever since that period. These have now attained a size much beyond the common bulk of fishes of the same kind; and although there are certain peculiarities distinguishing them from younger fishes, yet they evince no symptoms of that decrepitude and disease, which inevitably accompany a life protracted much beyond the usual space, among quadrupeds.

* * *

When any fish is hog-backed, with a small head, this is a sure sign of that fish being in season, of whatever sort it is.

* * *

Very little is known of the habits and economy of fish from the nature of the element in which they live. When I resided in Bushy Park, I caused the sides and bottom of a place to be bricked, through which a stream of very clear water ran, and stocked it with most of the varieties of our English fresh-water fish, supplying them abundantly with food; but though I constantly watched them, and could see all they did at any time of the day, the result of my observations was far from being satisfactory. The perch were the boldest and most familiar of any of the fish, as I found no difficulty in soon getting them to come with eagerness to take a worm out of my hand. The barbel were the shyest, and seemed most impatient of observation, although in the spring, when they could not perceive any one watching them, they would roll about and rub themselves against the brickwork, and show considerable playfulness. There were some large stones in my *piscatorium*, round which they would wind their spawn in considerable quantities. The trout appeared to bear their confinement with less philosophy than any of the others, making high leaps against the grating which admitted the water, and seeming at all times out of sorts and out of condition. The chub were also very restless, being continually on the move, but they never could resist a cockchafer when thrown to them. My flounders only moved at night, and the eels always made their escape, but in what way I never could conjecture, except, indeed, they had the power of crawling up the brickwork, which was about five feet from top to bottom, and generally two feet above the edge of the water. They certainly could not get through the grating, which was sufficiently close to confine bleak and gudgeons; and some of the eels were of a large size. The pike, of which I had eight of about five pounds' weight each, kept up their character for voracity. Out of 300 gudgeons, which were brought to me by a Thames fisherman, and which I saw counted into the reservoir, some few of which however died, there were scarcely any to be seen at the end of three weeks, though I should mention that the three large barbel I had, and six good-sized perch, probably partook of them.

* * *

The author of the Wild Sports of the West, in speaking of the immense Loughs Masks and Corrib, says—"It would appear, that in these lakes the fish are commensurate to the waters they inhabit. It is no unusual event for pikes of thirty pounds weight to be sent to their landlords by the tenants; and fish of even fifty pounds have not unfrequently been caught with nets and night-lines. The trouts in those loughs are also immensely large. From fifteen to sixteen pounds is no unusual size, and some have been found that reached the enormous weight of thirty. The perch tribe appear the smallest in the scale of relative proportion. These seldom exceed a herring size; but they too have exceptions, and perch of three or four pounds weight have been sometimes seen. Within fifty years this latter fish has increased prodigiously, and in the lakes and rivers where they abound, trouts have been found to diminish in an equal ratio.

* * *

Pike and perch were almost unknown in the rivers of Belcarra and Minola, and the chain of lakes with which they communicate, and these waters were then second to none for trout-fishing. Within ten years, my cousin tells me that he often angled in them,

and that he frequently killed from three to six dozen of beautiful middle-sized red trouts. Now fly-fishing is seldom practised there. The trout is nearly extinct, and quantities of pike and perch infest every pool and stream. The simplest methods of taking fish will be here found successful, and the lakes of Westmeath will soon be rivalled by the loughs of Mayo.

* * *

It is a curious fact, that the loughs where the party angled, though situate in the same valley, and divided only by a strip of moorland not above fifty yards across, united by the same rivulet, and in depth and soil at bottom, to all appearance, precisely similar, should produce fish as different from each other as it is possible for those of the same species to be. In the centre lake, the trout are dull, ill-shaped, and dark-coloured; the head large, the body lank, and though of double size, compared to their neighbours, are killed with much less opposition. In the adjacent loughs, their hue is golden and pellucid, tinted with spots of a brilliant vermilion. The scales are bright, the head small, the shoulder thick, and from their compact shape, they prove themselves, when hooked, both active and vigorous. At table they are red and firm, and their flavour is particularly fine—while the dark trout are white and flaccid, and have the same insipidity of flavour which distinguishes a spent from a healthy salmon.

* * *

It is remarkable that only three kinds of fish have been transported from foreign parts into Great Britain—the carp, the tench, and the gold-fish. * *

Maxims on fishing.—The following hints are quaint and useful.

"Do not imagine that, because a fish does not instantly dart off on first seeing you, he is the less aware of your presence; he almost always on such occasion ceases to feed, and pays you the compliment of devoting his attention to you, whilst he is preparing for a start whenever the apprehended danger becomes sufficiently imminent.

"If you pass your fly neatly and well three times over a trout, and he refuses it, do not wait any longer for him; you may be sure he has seen the line of invitation which you have sent over the water to him, and does not intend to come.

"Remember that, in whipping with the artificial fly, it must have time, when you have drawn it out of the water, to make the whole circuit, and to be at one time straight behind you, before it can be driven out straight before you. If you give it the forward impulse too soon, you will hear a crack: take this as a hint that your fly is gone to grass.

"It appears to me that, in whipping with an artificial fly, there are only two cases in which a fish taking the fly will infallibly hook himself without your assistance, viz.:—1st, when your fly first touches the water at the end of a straight line: 2d, when you are drawing out your fly for a new throw. In all other cases, it is necessary that, in order to hook him when he has taken the fly, you should do something with your wrist which is not easy to describe.

"If your line should fall loose and wavy into the water, it will either frighten away the fish, or he will take the fly into his mouth, without fastening himself; and when he finds that it does not answer his purpose, he will spit it out again before it has answered yours.

"Never mind what they of the old school say about 'playing him till he is tired.' Much valuable time, and many a good fish, may be lost by this antiquated proceeding. Put him into your basket as soon as you can. Every thing depends on the manner in which you commence your acquaintance with him. If you can at first prevail upon him to walk a little way down the stream with you, you will have no difficulty afterwards in persuading him to let you have the pleasure of seeing him at dinner.

"Do not leave off fishing early in the evening, because your friends are tired. After a bright day, the largest fish are to be caught by whipping between sunset and dark. Even, however, in these precious moments, you will not have good sport, if you continue throwing after you have whipped your fly off. Pay attention to this; and, if you have any doubt after dusk, you may easily ascertain the point, by drawing the end of the line quickly through your hand, particularly if you do not wear gloves.

"When you have got hold of a good fish which is not very tractable, if you are married, gentle reader, think of your wife, who, like the fish, is united to you by very tender ties, which can only end with her death, or her going into weeds. If you are single, the loss of the fish, when you thought the prize your own, may remind you of some more serious disappointment.

"Never angle in glaring-coloured clothes; perhaps green is that which the fish discern least, as varying less from those objects, such as trees, and herbage on the sides, to which they are familiarised. The angler should shelter himself (unless the water is muddy from rain) far from the bank, or behind a bush or tree, where he can just see the float, and so that his shadow does not, at any time, lie upon the water, especially where it is shallow, and the gravelly bottom can be discerned.

* * *

The angler should always have the wind at

his back, the sun or moon before him, as much as possible; in cold, windy weather especially, he should be on the weather-shore, where the fish then resort for warmth, and the calmness of the water. The east wind, for angling, has been universally execrated, but probably this may not hold good in rivers running from east to west.

* * *

At the conflux of rivers that ebb and flow, it is best angling at the ebb; sometimes, when the tide is not strong, they will bite at flood, but very rarely at high water.

* * *

Deep waters are best to angle in, as the fish are not then disturbed by wind or weather.

The best periods are from April to October; from three until nine in the morning, and from three in the afternoon, so long as there is light; the later, the better sport. In winter, the weather and times are much alike; the warmest is most preferable.

* * *

During the summer, even when the water is quite low and clear, no wind stirring, and the sun shining in its utmost lustre, and in the hottest part of the day, it is insisted, trout may be taken (although very few anglers are disposed to credit it), with a small wren's-tail, grouse, smoky dun, and black hackles, fishing straight down the water by the sides of streams and banks; keeping out of sight, and with as long a line as can conveniently be managed, with the foot-length very fine: they may be often seen with their fins above water, at which time they will eagerly snap at the abovementioned flies; and though upon hooking one the rest will fly off, they will soon be composed, and return for two or three times.

Right of Fishing.—It has been held that where the lord of the manor hath the soil on both sides of the river, it is a good evidence that he hath right of fishing; and it puts the proof upon him who claims liberam piscariam; but, where a river ebbs and flows, and is an arm of the sea, there it is common to all, and he who claims a privilege to himself, must prove it; for if the trespass is brought for fishing there, the defendant may justify that the place is brachium maris, in quo unusquique subditus domini regis habet et habere debet liberam piscariam. In the Severn the soil belongs to the owners of the land on each side; and the soil of the river Thames is in the king, but the fishing is common to all. He who is owner of the soil of a private river, hath separata piscaria; and he that hath libera piscaria, hath a property in the fish, and may bring a possessory action for them; but communis piscaria is like the case of all other commons. One that has a close pond, in which there are fish, may call them pisces suas, in an indictment, &c.; but he cannot call them bona et catalla, if they be not in tanks. There needs no privilege to make a fish-pond, as there doth in case of a warren.—*Ency. Brit.*—*Daniel*—*Jesse*—*Wild Sports*, *&c.*

Fish-hook, *s.* A hook for catching fish.

Fish-pond, *s.* A small pool for fish. *Vide* Pond.

Fisher, *s.* One who is employed in catching fish.

Fisherman, *s.* One whose employment and livelihood is to catch fish.

Fishery, *s.* The business of catching fish.

Fishing, *s.* Commodity of taking fish.

Fishing-rod, *s.* An implement for angling. *Vide* Rod.

Fishy, *a.* Consisting of fish; having the qualities of fish.

Fistula, *s.* A sinuous ulcer callous within.

Fistulous, *a.* Having the nature of a fistula.

Fit, *s.* A paroxysm of any intermittent distemper; any short return after intermission.

For a dog that has fits when hunting,—Strike him smartly with a whip or stick until he is roused; the stimulus from the blows will recover as well as letting blood, and prevent a too great effusion, which is often the case when bled in the field.

Fitchat or Fitchew, *s.* A stinking little beast, that robs the henroost and warren.

Fives, *s.* A kind of play with a ball; a disease of horses.

FIXTURE, *s.* The place where hounds meet.

FIZGIG, *s.* A kind of dart or harpoon, with which seamen strike a fish.

FLAGWORM, *s.* A grub bred in watery places among flags or sedge.

FLAME, *s.* Light emitted from fire; a stream of fire.

FLANK, *s.* The part of the side of a quadruped near the hinder thigh; in men, the latter part of the lower belly.

FLAP, *s.* Any thing that hangs broad and loose.

FLASK, *s.* A bottle, a vessel, a powder-horn.

FLAW, *s.* A crack or breach in any thing; a fault, a defect; a sudden gust; a violent blast.

FLAX, *s.* The fibrous plant of which the finest thread is made; the fibres of flax cleansed and combed for the spinner.

FLAY, *v.* To strip off the skin; to take off the skin or surface of anything.

FLEA, *s.* A small insect. *Vide* VERMIN.

Hares are very subject to *fleas*. Linnæus tells us, that cloth made of their fur will attract these insects, and preserve the wearer from their troublesome attacks.

FLEAM, *s.* An instrument to bleed cattle.

FLEDGED, *a.* Full feathered, able to fly.

FLEDGE, *v.* To furnish with wings, to supply with feathers.

FLEW, *s.* The large chaps of a deep-mouthed hound; a kind of net.

Flews may be described as of two kinds, the one for drawing, the other to be placed either as a stop to a drag-net, or to be set and left quietly standing in a pond or river, to intercept the fish. Those for drawing should be made of stouter materials, and the lint of all should be of silk. The expense is greater at the first; but the compiler has had silk flews of both sorts, where the lint has outlasted three sets of walling, and still remained perfectly good. It must, however, be understood, that great care was observed in the washing and drying his nets; for silk has no peculiar power, any more than hemp, to defend itself against the heat, which a few hours will generate when thrown together full of mud and weeds; and both, by such slovenly inattention, are as quickly spoiled: yet carefully managed, a silk net will endure to the utmost wishes of the proprietor; and such is the quality of the silk, when wet, that the fish which touches it is sure to be entangled; the texture is so pliant, that a fish is enveloped before being sensible of it, and the more he struggles the faster he is confined.

For a dragging-flew, the lint two inches and a quarter mesh, seventy meshes deep, and fifty-two yards in length (to be hung twenty yards long and eight feet deep), it will take four pounds and a half of silk.

For a setting flew, of a similar mesh, and ninety deep, with the same length of lint and depth of hanging, five pounds and a quarter of silk; from these may be calculated any larger or smaller size. Never tan or colour flews, it renders them easier to be discerned by the fish.

The walls or trammels of flews should be at least eighteen inches square (but two feet is preferable), those of nine or twelve inches, hung diamond fashion, are only calculated to receive a fish that strikes point blank; it is impossible for a good sized fish to get in sideways, (whereby they are more entangled than by touching the flew in any other direction), besides, these small wallings render a net more cumbersome, and are, for the most part, useless. Flews should be very lightly leaded, the floats or corks nicely adjusted, and where the fish run very large, the mesh of the lint may be extended; always recollecting that in thread nets, the materials for the lint must be three twisted, and cannot be too strong or too fine.

In carp-fishing, drawing with flews is the most killing mode yet devised, they slide so lightly over the mud, and hamper the fish in their progress through the water, which the drag-net does not.

FLEWED, *a.* Chapped, mouthed.

Flexor, *s.* The general name of the muscles which act in contracting the joints.

Flight, *s.* The act of using wings; removal from place to place by means of wings; a flock of birds flying together; the birds produced in the same season, as the harvest flight of pigeons; the space passed by flying.

Flint, *s.* A kind of stone used in firelocks; any thing eminently or proverbially hard.

None are better than the most transparent of the common black flints. Great quantities (considered as good as any) come to London from Lord Cadogan's estate at Brandon. They should be put in with the flat side upwards, and stand well clear of the hammer, and yet be long enough to throw it. Screw them in with leather, as lead strains the cock, and cloth is dangerous from being liable to catch fire. If very particular about the neat appearance of your gun, get a punch for stamping the leathers, and change them as often as you put new flints.

To make a flint strike lower you have only to reverse the usual way of putting it in; but, if you want to strike higher, you must either put a very thick leather, or screw the flint in with a bit of something under it. This temporary way of regulating a lock, so as to make the hammer fall, is worth knowing, as it often saves vexation and loss of time. —*Hawker.*

Flix, *s.* Down, fur, soft hair.

Float, *v.* To swim on the surface of the water; to pass with a light irregular course.

Float, *s.* The act of flowing; any body so contrived or formed as to swim on the water; the cork or quill by which the angler discovers the bite.

Floats are of many kinds; of swan, goose, muscovy duck, and porcupine quills. The first is preferable, when light baits are used in rivers or deep waters, and the others for slow streams and ponds, where the water is not very deep, and where the baits are pastes, &c. The quills of the bustard some anglers use, believing that the small black spots with which they are (erroneously) said to be mottled, appear to the fish as so many little flies, and attract them by this deception. For heavy fishing with worm or minnow, and in rapid eddies, the cork float is best, and is made by taking a cork free from flaws, and with a small red hot iron bore a hole lengthways through the centre; it is then to be cut across the grain with a sharp knife, about two-thirds of the length, and the remaining third (which is the top of the float) rounded with it, and then neatly finished with pumice stone, the whole resembling in shape a child's peg top. For pike, barbel, and large chub, the cork should be the size of a small bergamot pear; for trout, perch, eels, not bigger than a walnut when the green rind is removed. A quill is fitted to the hole, and used formerly to be cut off close to the cork at each end of it. Some direct cork floats to be proportioned to the number of hairs the line is made of, and no larger than a horsebean for a single hair; but so diminutive a cork is of no use, and the quill floats will answer better.

Some recommend the shape of a cork like a pear, and not to exceed the size of a nutmeg, and the quill that passes through it not to be more than half an inch above and below the cork; they are now made with a cap at the top, and wire for the line to pass through at the bottom. The advantage the cork float has over the bare quill is that it allows the line to be loaded so heavily, that the hook sinks almost as soon as put into the water; whereas, when lightly loaded, it does not reach the bottom until near the end of the swim.

* * *

Quill floats are thus made: the barrel part is cut off from that where the feathers grow, the inside cleared from the film, and a small piece of pitch fixed close to the end; a piece of cotton is then introduced, and upon that another piece of pitch, which not only confines the cotton, but assists in making the float discernible in water. A piece of soft wood, the size of the quill, about two inches long, of which nearly one inch is to be introduced into the quill, after being dipped into a melted cement of bees-wax, resin, and chalk, in equal quantities; the lower end of this plug is to be tapered, with a fine awl, a piece of brass twisted wire, with a round eye at the end, is to be passed as a screw into the plug, with a pair of pliers, turning round in the float; the line passes through this eye of the wire, and the upper part of the quill is fastened to the line by a hoop made of a larger sized quill, so as to admit the thickness of the line, and which

ought to fasten nearly an inch from the top of the quill. (These caps should be secured by fine waxed silk, varnished over, which prevents their splitting; as also should the end of the quill round the plug, which will greatly preserve the float.) These hoops upon the top of the float may be dyed red (which will render them more conspicuous), by putting as much powdered Brazil wood into stale chamber-ley as will make it a deep red, which may be seen by applying it upon a piece of white paper; then take some spring-water, and put a handful of salt and a small quantity of argal into it; stir them until they are dissolved, and boil them well in a saucepan; when the water is cold, scrape the quills, and steep them a little time in the mixture; afterwards let them remain in the chamber-ley for a fortnight, and, after drying, rub them with a woollen cloth, and they will be transparent.

If two quills are wanted to be joined together, it may be done by a plug a little thicker in the middle than at the ends, which is to go into the mouth of the quills; dip the two ends into the above cement warmed, and fix the quills upon it, or by dipping the two ends of both quills, without the plug, into the cement, and inserting one into the other while thoroughly warm, the cement, when cold, will strongly fix them; rub the float all over with wet coal-dust and a woollen cloth, dry it with one of linen, and, after that, dry coal-dust will polish it effectually. Quill floats should be so leaded as to just suffer their tops to appear above the surface, that the slightest nibble may be perceived; if either a cork or a quill float fall on one side, the lead is either on the ground, or insufficient to keep them in a proper position.

In fishing with a float, the line should be a foot shorter than the rod; if longer, it is inconvenient when a fish is wanted to be disengaged; and the rod should be fourteen or fifteen feet long, light, stiff, and so smart in the spring as to strike at the extremity of the whalebone.—*Daniel—Fisher's Guide, &c.*

Flock, *s.* A company of birds or beasts; a company of sheep, distinguished from herds, which are of oxen; a lock of wool.

Flock, *v.* To gather in crowds or large numbers.

Flog, *v.* To lash, to whip.

Flood, *s.* A body of water; a deluge, an inundation; flow, flux, not ebb.

Flop, *v.* To clap the wings with noise.

Flounder, *s.* The name of a small flat fish.

The flounder inhabits every part of the British sea, and is found, although at a great distance, in all the rivers that communicate with it; numbers of them that are not taken, lose themselves, continuing and breeding with vast fecundity in the rivers, and those grow to be the largest and best flavoured. They will likewise live in ponds, and are a profitable fish to stock them with, as they soon get fat, will live many hours out of their element, and consequently may be carried to a great distance; but they will not breed when confined. The colour of the upper part of the body is a pale brown, sometimes marked with a few spots of dirty yellow; the belly is white. It may easily be distinguished from the plaice, or any other fish of this genus, by a row of sharp small spines that surround its upper sides, and are placed just at the juncture of the fins with the body; another row marks the side line, and runs half way down the back. Mr. Pennant mentions hearing of one that weighed six pounds; but a flounder of half that weight is not common. Flounders spawn in May and June, and are in season the rest of the year. They swim in shoals, and bite freely at all hours of the day, but particularly on the rise of the water by flood or tide, and in warm weather, with a little wind, and are to be fished for with a strong line and good gut at the bottom, as some of them are large, and struggle much. The best places to angle for them, are by the sides and at the tails of deep streams, where the bottom consists of fine gravel, sand, or loam, or in still places of the same quality near the banks; two or three rods may be used, with a bullet on the lines, to lie on the ground in streams; and when in still water, a shot or two on the line, and the hook small. Brandlings that are taken from rotten tan, well scoured, are the best baits. They will take the lobworm, and even the minnow; a flounder weighing twenty-three ounces being caught in 1799 with the latter.

Flounder, *v.* To struggle with violent and irregular motions.

Flour, *s.* The edible part of the corn, or any grain reducible to powder.

Flue, *s.* A small pipe or chimney to convey air; soft down or fur.

Fluid, *s.* In physic, an animal juice; any thing that flows.

Flush, *v.* To colour, to redden; to elate; to spring birds.

Flush, *s.* Afflux, sudden impulse, violent flow; cards all of a sort.

Flutter, *v.* To take short flights with great agitation of the wings; to move irregularly.

Fly, *v.* To move through the air with wings; to pass through the air; to pass swiftly; to fly at; to burst asunder with a sudden explosion; to shiver; to run away; to attempt to escape.

Fly, *s.* A small winged insect; that part of a machine which, being put into a quick motion, regulates the rest.

From my own experience I should suppose that in all the habitable parts of the globe, certain water-flies exist wherever there is running water. Even in the most ardent temperature, gnats and musquitoes are found, which lay their congeries of eggs on the water, which, when hatched, become, first worms, afterwards small shrimp-like aurelia, and, lastly, flies. There are a great number of the largest species of these flies on stagnant waters and lakes, which form a part of the food of various fishes, principally of the carp kind; but the true fisherman's fly—those which are imitated in our art—principally belong to the northern, or at least temperate parts of Europe, and I believe are nowhere more abundant than in England. It appears to me, that since I have been a fisherman, which is now the best part of half a century, I have observed in some rivers where I have been accustomed to fish habitually, a diminution of the numbers of flies. There were always some seasons in which the temperature was favourable to a quantity of fly; for instance, fine warm days in spring for the grannam, or brown-fly; and like days in May and June for the alder-fly, May-fly, and stone-fly: but I should say, that within the last twenty years I have observed a general diminution of the spring and autumnal flies, except in those rivers which are fed from sources that run from chalk, and which are perennial—such as the Wandle, and the Hampshire and Buckinghamshire rivers; in these streams the temperature is more uniform, and the quantity of water does not vary much. I attribute the change of the quantity of flies in the rivers to the cultivation of the country. Most of the bogs or marshes which fed many considerable streams are drained; and the consequence is, that they are more likely to be affected by severe droughts and great floods—the first killing, and the second washing away the larvæ and aurelias. May-flies, thirty years ago, were abundant in the upper part of the Teme river, in Herefordshire, where it receives the Clun: they are now rarely seen.

* * *

In December and January there are a few small gnats or waterflies on the water in the middle of the day, in bright days, or when there is sunshine. These are generally black, and they escape the influence of the frost by the effects of light on their black bodies, and probably by the extreme rapidity of the motions of their fluids, and generally of their organs. They are found only at the surface of the water, where the temperature must be above the freezing point. In February a few double-winged water-flies which swim down the stream are usually found in the middle of the day—such as the willow-fly; and the cow-dung fly is sometimes carried on the water by winds. In March there are several flies found on most rivers. The grannam or green-tail fly, with a wing like a moth, comes on generally morning and evening, from five till eight o'clock, A. M. in mild weather in the end of March and through April. Then there are the blue and brown, both ephemeral, which come on, the first in dark days, the second in bright days; these flies, when well imitated, are very destructive to fish. The first is a small fly with a palish yellow body, and slender, beautiful wings, which rest on the back as it floats down the water. The second, called the cob in Wales, is three or four times as large, and has brown wings, which likewise protrude from the back, and its wings are shaded like those of a partridge, brown and yellow-brown. These three kinds of flies lay their eggs in the water, which produce larvæ that remain in the state of worms, feeding and breathing in the water till they are prepared for their metamorphosis and quit the bottoms of the rivers, and the mud and stones, for the surface, and the light and air. The brown fly usually disappears before the end of April, likewise the grannam; but of the blue dun, there is a succession of different tints, or species, or varieties, which appear in the middle of the day, all the summer and autumn long. These are the principal flies on the Wandle—the best and clearest stream near London. In early spring these flies have

dark olive bodies; in the end of April and beginning of May they are found yellow; and in the summer they become cinnamon-coloured; and again, as the winter approaches, gain a darker hue. I do not, however, mean to say that they are the same flies, but more probably successive generation of ephemera of the same species. The excess of heat seems equally unfavourable as the excess of cold, to the existence of the smaller species of water insects, which, during the intensity of sunshine, seldom appear in summer, but rise morning and evening only. The blue dun has, in June and July, a yellow body; and there is a water-fly which in the evening is generally found before the moths appear, called the red spinner. Towards the end of August, the ephemera appear again in the middle of the day—a very pale, small ephemera, which is of the same colour as that which is seen in some rivers in the beginning of July. In September and October, this kind of fly is found with an olive body, and it becomes darker in October, and paler in November. There are two other flies which appear in the end of September, and continue during October, if the weather be mild; a large yellow fly with a fleshy body and wings like a moth, and a small fly with four wings, with a dark or claret-coloured body, that when it falls on the water has its wings like the great yellow fly, flat on its back. This, or a claret-bodied fly, very similar in character, may be likewise found in March or April, on some waters. In this river I have often caught many large trout in April and the beginning of May, with the blue dun, having the yellow body; and in the upper part of the stream below St. Alban's, and between that and Watford, I have sometimes, even as early as April, caught fish in good condition; but the true season for the Colne is the season of May-fly. The same may be said of most of the large English rivers containing large trouts, and abounding in May-fly: such as the Test and the Kennet; the one running by Stockbridge, the other by Hungerford. But in the Wandle at Carshalton and Beddington, the May-fly is not found: and the little blues are the constant, and, when well imitated, killing flies on this water; to which may be joined a dark alder fly, and a red evening fly. In the Avon, at Ringwood and Fordingbridge, the May-fly is likewise a killing fly; but as this is a grayling river, the other flies, particularly the grannam and blue and brown, are good in spring, and the alder-fly or pale blue later, and the blue dun in September and October, and even November. In the streams in the mountainous parts of Britain, the spring and autumnal flies are by far the most killing. The Usk was formerly a very productive trout stream, and the fish being well fed by the worms washed down by the winter floods, were often in good season, cutting red in March and the beginning of April: and at this season the blues and browns, particularly when the water was a little stained after a small flood, afforded the angler good sport.

* * *

As we are on the subject of tying, I must observe, that the advantage one derives from being able to construct his own flies is wonderful; in fact, without attaining this accomplishment in the 'gentle art,' no one can fish comfortably or successfully. No stock, however extensive, will afford a supply adapted for every change of weather and water, and a man may lose a day overlooking an interminable variety of kinds and colours, in a vain search after one killing fly. Not so the artist: the favourite insect being once ascertained, he speedily produces an imitation and fills his basket, while his less fortunate neighbour is idly turning the pages of his over-stocked fishing-book.

I had two sporting friends, who were excellent instances of this. Colonel S—— was an ardent, and, I may add, a very tolerable angler. No one went to more trouble and expense in procuring the most approved flies; he never tied, or attempted to tie one, and he assured me he had many hundred dozens in his possession. To find a new fly, was with him sometimes the labour of a day: and when about to try another water, he would spend hours toiling through his immense variety, before he could succeed in discovering the necessary colour and description. I have seen him with Job-like patience, labouring through endless papers and parcels in search of a paltry insect, that I could fabricate in five minutes.

His companion, Captain B——, ran into an opposite extreme. He rarely had a second casting line, and seldom a second set of flies. Did the day change, or the river fill or lower, he sat down on the bank, ripped wings and dubbings from his hooks, and prepared a new outfit in a twinkling. I never met an angler who was so certain of filling a basket as my friend B——. His system, however, I would totally disapprove of, Without burthening oneself with enough to furnish out a tackle-shop, a small and effective collection is desirable, and it is absurd to lose a fortunate half-hour tying on the river bank, what could be more conveniently fabricated during the tedium of a wet day within doors. An accident may rob the most discreet angler of his flies, and surely it is necessary to have a fresh relay to put up? But though I take a sufficiency along with me, I never leave home without being provided with the materials for constructing new ones. An hour may bring ephemeræ on the waters,

which you must imitate, or you will cast in vain; before evening they will have vanished, and given place to some new variety of the insect world. Thus far, at least, the tier possesses an advantage over him who cannot produce a fly, that no collection which human ingenuity can form will compensate.

* * *

FLIES IN GENERAL USE.

February.—Dark fox, hare's ear and claret, dark grey hackle, plain black hackle, grey sooty.

March.—Plain black hackle, plain wren, dark brownrail, dark olive camel, fox half a shade lighter than last month, dark brown camel, latter end of the month brown coughlin, dark red hackles' bodies with brown coughlin, dirty tawny bodied with hare's ear, green cowdung, grey sooty.

April.—Grey coughlin, light olive camel, light brown rail, ash fox-blow for latter end of the month, orange cow dung, blue blow, tipped wing black, plain black midge, hare's ear and yellow, hare's ear and green, plain red hackle orange bodied, do. tipped black hackle, plain black hackle, blue bodied black hackle, buff fox, grey sooty, all kind of wren hackles, grey hackles. This list will bring you into May, and some of them into June.

May.—Hawthorn fly, yellow may fly, golden sooty, light fox, cream camel, brown rail, fancy hackle flies, caterpillars, green beetles, black do., golden palmers, yellow and orange palmers, stone fly, plain and brown beetles.

June.—All the may flies, and green fox come in now, and with light fox continues all the summer. light rail, blue bodied black hackle, orange bodied red, fancy wrens, gold palmer, green beetle, scaldcrow midge, and night moth.

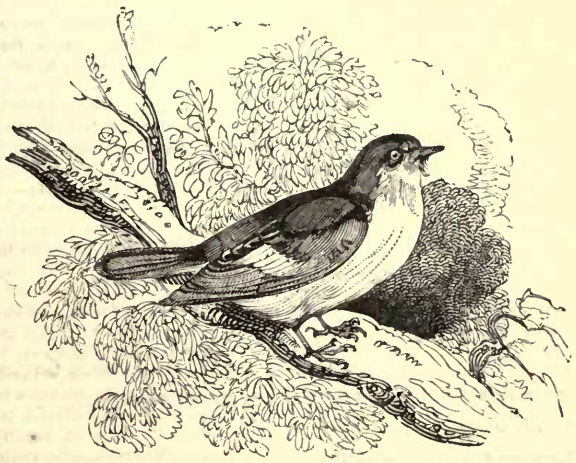
July and August.—The above flies, and the cinnamon called the cadbait fly.

September.—Muddy green fox, green rail with plain red hackle, orange body do., light rail, plain and fancy wrens; small cadbait breasted with woodcock hackle and double wings, last during the fishing season.

* * *

In fly-fishing, the angler should recollect to take with him some portion of all the different materials for fly-making: so whimsical sometimes are trouts, that they may be seen to take insignificant flies greedily, which at other times they would not look at. When this happens, catch one of such flies, and try how nearly art can imitate nature, by framing one as similar as can be.—*Davy—Wild Sports—Daniel.*

FLYCATCHER, *s.* One that hunts flies; a bird.



Of the birds which constitute this class, we find only two kinds that inhabit this island, and these are not the most numerous of the various tribes with which this country abounds.

The characters of this genus with us are somewhat equivocal, and not well ascertained; neither do we know of any common name in our language by which it is distinguished. Mr. Pennant describes it thus:—"Bill flatted at the base, almost triangular, notched at the end of the upper mandible, and beset with bristles at its base."—*Bewick.*

Flyfish, *v.* To angle with a hook baited with a fly.

Foal, *s.* The offspring of a mare, or other beast of burden.

Foal, *v.* To bring forth a foal.

Foam, *s.* The white substance which agitation or fermentation gathers on the top of liquors; froth, spume.

Foam, *v.* To froth, to gather foam; to be in rage; to be violently agitated.

Fodder, *s.* Dry food stored for cattle against winter.

Fold, *s.* The ground in which sheep are confined; the place where sheep are housed; the flock of sheep; a double, a complication.

Fomentation, *s.* Partial bathing, called steeping; the lotion prepared to foment the parts.

Fomentations are divided into *emollient* and *anodyne*.

EMOLLIENT FOMENTATION.

Boil marshmallows in water for some time, strain off the liquor, and bathe the affected parts with it while warm.

ANODYNE FOMENTATION.

1. White poppy heads broken, two dozen.
   Hemlock, two handfuls.

Boil for two hours gently in six quarts of water.

2. Wormwood dried, and camomile flowers of each . . . 4 oz.
   Rue . . . . . 3 oz.
   Bay leaves . . . . 2 oz.

Boil them for one hour in a gallon of water.

The efficacy of a fomentation depends on its being properly applied: therefore, the liquid should be only *as hot as the part can bear without pain*. Large flannel cloths should be dipped into the fomentation, lightly wrung out, and spread over the affected part, and be renewed before they become cold; this ought to be continued for half an hour at least, and repeated three or four times a day.

Emollient fomentation is adapted to inflamed swellings, from whatever cause they may arise; and, in the absence of others, warm water alone will be found an useful substitute.

Warm water, if used assiduously, and at a proper temperature, is an excellent fomentation. In inflammation of the eye, it should not be above 98°; in inflamed and painful swellings it should seldom exceed 100°. In strains of the back sinews, vinegar is preferable; and as the injury is deeply seated, the fomentation may be applied hotter.

When employed for inflammation of the bowels, it should be still hotter, so hot, indeed, that the hand cannot feel it without pain. The best mode of application is by a long piece of woollen cloth, with the ends joined, that it may be wrung out of the boiling liquor by placing a stick through each end. When thus applied, it may be called a *steam fomentation*. A man on either side the horse is required to apply this fomentation effectually. Where the injury is not extensive, the fomentation may be applied with a large sponge, or a thick woollen cloth, or old rug or blanket.—*White*.

Foot, *s.* The part upon which we stand; that by which any thing is supported; the base; a measure containing twelve inches.

Forage, *s.* Search of provisions; provisions sought abroad; provisions in general; food for horses.

Forceps, *s.* Properly signifies a pair of tongs, but is used for an instrument in chirurgery to extract any thing out of wounds.

Ford, *s.* A shallow part of a river.

Ford, *v.* To pass without swimming.

Forehand, *s.* That part of a horse which is before the rider.

Forehand implies that part of a horse extending from the ears to the withers; which to be handsome should be long, and rise gradually from the upper point of the shoulder blade to the very extremity of the ear. A forehand of this description adds greatly to the majestic appearance and value of a horse. But a horse low before, with a short forehand, and indented crest, can never become an object of attraction.—*Taplin*.

FOREHEAD, *s.* That part of the face which reaches from the eyes upwards to the hair: impudence, confidence, assurance.

To observe the form and effect of the forehead, it will be necessary to get before the horse. It is the space extending from the roots of the ears, and between the eyes, which being broad and flat, having a feather or star in the centre, constitutes a degree of beauty, and may be supposed to have a cross of the Arabian in the blood. If a horse having a wide flat forehead, has the advantage of a full prominent spirited eye, they at the first approach afford no small indication of excellence; and, upon nearer inspection, a corresponding symmetry is expected to follow.—*Taplin.*

FORELEGS, *s.* That part of a horse beginning at the lower extremity of the shoulder blade before, and the elbow behind.

The forelegs consist of what are termed the arms (or thighs), which extend to each knee; the shank-bone from the knee to the fetlock joint; the fetlock bone is continued from thence to the coronary bone, in part fills the cavity, or box of the hoof, being lodged in the coffin-bone, supported by the nut-bone behind; these last are deposited in the membraneous mass denominated the inner sole, the whole being terminated by the bottom of the hoof, the frog, and the outer sole. The forelegs, to be uniform (in a front view), should be wide at the upper part next the breast, strong and broad in the arm, bony below the knee, free from splents, a broad sound hoof, firm sole, and a frog without thrushes.—*Taplin.*

FORELOCK, *s.* The hair that grows from the forepart of the head.

FOREST, *s.* A wild uncultivated tract of ground, with wood.

FORESTER, *s.* An officer of the forest; an inhabitant of the wild or woody country.

The forester is an officer sworn to preserve the vert and venison within his walk, and not to conceal but to attach all offenders, to present the offences and attachments in the next court of attachments, or swainmote, and to take care of the lawing of dogs.

FORESTER, *s.* A pony bred in the forest.

The New Forest ponies were supposed to be the produce of the Spanish jennets, driven ashore on the coast of Hampshire, in the dispersion of the Invincible Armada in the reign of Elizabeth.

The ponies of the New Forest, Dorsetshire, although private property, run wild in their extensive domain, as if in a state of nature, and are often, in the summer season, seen feeding like deer in herds of a score or two. Their colts, when wanted, are either hunted down by horsemen, or caught by stratagem. With few exceptions, these foresters are ill made and ordinary, but useful for almost every kind of employment, and they have the quality of being very sure-footed.

Nearly the same remarks may also be applied to the horses of Exmore Forest, in Devonshire. When the general utility of those inferior races of the horse is considered, it may be submitted whether it would not be generally advantageous, and individually profitable, to improve their form and quality by a proper choice of breeding stock, without attempting to increase their height.—*Le Keux.*

FORGE, *s.* The place where iron is beaten into form; a place where horses are shod.

FORGE, *v.* To form by the hammer.

FOWL, *s.* A winged animal, a bird.

FOWL, *v.* To kill birds for food or game.

FOWLER, *s.* A sportsman who pursues birds.

FOWLING-PIECE, *s.* A gun for birds.

Fox, *s.* A wild animal of the dog kind, remarkable for his cunning.

The fox is a native of almost every quarter of the globe, and is of such a wild nature, that it is impossible fully to tame him. He is esteemed the most sagacious and most crafty of all beasts of prey. The former quality he shows in his mode of providing himself an asylum, where he retires from pressing dangers, where he dwells, and where he brings up his young: and his craftiness is discovered by his schemes to catch lambs, geese, hens, and all kinds of small birds. The fox, if possible, fixes his abode on the border of a wood, in the neighbourhood of some farm or village: he listens to the crowing of the cocks, and the cries of the poultry; he scents them at a distance; he chooses his time with judgment; he conceals his road as well as his design; he slips forward with caution, sometimes even trailing his body, and seldom makes a fruitless expedition. If he can leap the wall, or get in underneath, he ravages the court-yard, puts all to death, and retires softly with his prey, which he either hides under the herbage, or carries off to his kennel. He returns in a few minutes for another, which he carries off and conceals in the same manner, but in a different place. In this way he proceeds till the progress of the sun, or some movements perceived in the house, advertise him that it is time to suspend his operations, and to retire to his den. He plays the same game with the catchers of thrushes, woodcocks, &c. He visits the nets and bird-lime very early in the morning, carries off successively the birds which are entangled, and lays them in different places, especially by the sides of highways, in the furrows, under the herbage or brushwood, where they sometimes lie two or three days; but he knows perfectly where to find them when he is in need. He hunts the young hares in the plains, seizes old ones in their seats, digs out the rabbits in the warrens, discovers the nests of partridges and quails, seizes the mother on the eggs, and destroys a vast quantity of game. He is exceedingly voracious, and, when other food fails him, makes war against rats, field-mice, serpents, lizards, and toads. Of these he destroys vast numbers, and this is the only service that he appears to do to mankind.

When urged by hunger, he will also eat roots or insects; and the foxes near the coasts will devour crabs, shrimps, or shell-fish. In France and Italy they do incredible mischief, by feeding on grapes, of which they are excessively fond.

We are told by Buffon, that he sometimes attacks bee-hives, and the nests of wasps, for the sake of what he can find to eat: and that he frequently meets with so rough a reception, as to force him to retire, that he may roll on the ground and crush those that are stinging him; but having thus rid himself of his troublesome companions, he instantly returns to the charge, and obliges them at length to forsake their combs, and leave them as a reward of his victory. When pressed by necessity he will devour carrion. "I once," says M. Buffon, "suspended on a tree, at the height of nine feet, some meat, bread, and bones. The foxes had been at severe exercise during the night; for next morning the earth all round was beaten, by their jumping, as smooth as a barn-floor."

The fox exhibits a great degree of cunning in digging young rabbits out of their burrows. He does not enter the hole, for in that case he would have to dig several feet along the ground, under the surface of the earth; but he follows their scent above, till he comes to the end, where they lay, and then scratching up the earth, descends immediately upon, and devours them.

Pontoppidan informs us, that when the fox observes an otter go into the water to fish, he will frequently hide himself behind a stone, and when the otter comes to shore with his prey, he will make such a spring upon him, that the affrighted animal runs off, and leaves his booty behind. A certain person, continues this writer, was surprised on seeing a fox near a fisherman's house, laying a parcel of storks' heads in a row: he waited the event; the fox hid himself behind them, and made a booty of the first crow that came for a bit of them.

The fox prepares for himself a convenient den, in which he lies concealed during the greater part of the day.

This is so contrived, as to afford the best possible security to the inhabitant, being situated under hard ground, the roots of trees, &c. and is besides furnished with proper outlets, through which he may escape in case of necessity. This care and dexterity in constructing for himself a habitation, is, by M. Buffon, considered as alone sufficient to rank the fox among the higher order of quadrupeds, since it implies no small degree of intelligence.

The fox, (says he,) knows how to ensure his safety, by providing himself with an asylum to which he retires from pressing dangers, where he dwells, and where he brings up his young. He is not a vagabond, but lives settled in a domestic state. This difference, though it appears even among men, has greater effects, and supposes more powerful causes, among the inferior animals. The single idea of a habitation, or settled place of abode, the art of making it commodious, and concealing the avenues to it, imply a superior degree of sentiment.

He is one of those animals that, in this country, are made objects of diversion in the chase. When he finds himself pursued, he generally makes towards his hole, and penetrating to the bottom, lies till a terrier is sent in to him. If his den is under a rock, or the roots of trees, which is often the case, he is safe, for the terrier is no match for him there; and he cannot be dug out by his enemies. When the retreat to his kennel is cut off, his stratagems and shifts to escape are as surprising as they are various. He always takes to the most woody parts of the country, and prefers the paths that are most embarrassed with thorns and briers. He runs in a direct line before the hounds, and at no great distance from them; and, if hard pushed, seeks the low wet grounds, as if conscious that the scent does not lie so well there. When overtaken, he becomes obstinately desperate, and bravely defends himself against the teeth of his adversaries, even to the last gasp.

Dr. Goldsmith relates a remarkable instance of the parental affection of this animal, which, he says, occurred near Chelmsford:— "A she fox that had, as it should seem, but one cub, was unkennelled by a gentleman's hounds, and hotly pursued. The poor animal, braving every danger rather than leave her cub behind to be worried by the dogs, took it up in her mouth, and ran with it in this manner for several miles. At last, taking her way through a farmer's yard, she was assaulted by a mastiff, and at length obliged to drop her cub; this was taken up by the farmer." And we are happy to add that the affectionate creature escaped the pursuit, and got off in safety.

Of all animals the fox has the most significant eye, by which is expressed every passion of love, fear, hatred, &c. He is remarkably playful, but, like all savage creatures half reclaimed, will on the least offence bite even those with whom he is most familiar.

He is never to be fully tamed; he languishes when deprived of liberty, and if kept too long in a domestic state he dies of chagrin. When abroad, he is often seen to amuse himself with his fine bushy tail, running sometimes for a considerable while in circles to catch it. In cold weather he wraps it about his nose.

In the northern countries there is a black fox, a variety of the common fox. The Kamschatdales informed Dr. Grieve that these were once so numerous with them that whenever they fed their dogs, it was a difficult piece of labour to prevent them from partaking. The doctor says, that when he was in Kamschatka, they were in such plenty near the forts, that in the night they entered them without any apparent apprehension of danger from the dogs of the country.

One of the inhabitants, he informs us, caught several of them in the pit where he kept his fish.

The mode usually adopted by the inhabitants for taking them is by traps baited with live animals; and, for the greater security, two or three of these traps are placed upon one hillock, that, whatever way the foxes approach, they may fall into one of them. This is found necessary, since those which have been once in danger, ever afterwards go so cautiously to work, as frequently to eat the bait without being seized. But, with all their cunning, when several traps are employed, it

is difficult for them to escape. Their skins are very valuable.

* * *

Foxes, Anecdotes of.—Near the Falls of Clyde, on the summit of an awful precipice, a spot is shown where a fox once exhibited extraordinary cunning. Being hard pressed by the dogs, he seized in his teeth a fast hold of some pendulous shrub growing on the verge, threw himself across the brow of the precipice, and after remaining there until the scent was strong, he recovered the ground, and jumped into an adjoining thicket. Three couple of the leading hounds, in the eagerness of pursuit, actually rushed over the bank, and were dashed to atoms. It is said that the fox escaped. The anecdote is told and credited in the neighbourhood.

* * *

The old Duke of Grafton had his hounds at Croydon, and occasionally had foxes taken in Whittlebury forest, and sent up in the venison-cart to London; the foxes thus brought, were carried the next hunting morning in a hamper behind the duke's carriage, and turned down before the hounds. In the course of this plan, a fox was taken from a coppice in the forest, and forwarded as usual. Some time after a fox was caught in the same coppice, whose size and appearance was so strikingly like that got at the same spot, that the keepers suspected it was the fox they had been in possession of before, and directed the man who took him to London, to inquire whether the fox hunted on such a day was killed, or escaped; the latter having been the case, the suspicion of the keepers was strengthened. Some short time after, a fox was again caught in the same coppice, which those concerned in the taking were assured was the fox they had bagged twice before; to be, however, perfectly able to identify their old acquaintance, should another opportunity offer, previous to his third journey to town, he had one ear slit, and some holes punched through the other. With these marks he was despatched to London, was again hunted, and escaped, and within a very few weeks was retaken in the same coppice; when his marks justified the keeper's conjectures, in spite of the seeming improbability of the fact. It is with some concern, that the conclusion of this singular account is added, which terminates in the death of poor reynard, who was killed after a very severe chase, bearing upon him the signals of his former escapes, and which ought to have entitled him to that lenity and privilege which was formerly granted to a stag who had beat his royal pursuers.

* * *

Some curious instances have been related to me of the cunning evinced by foxes, not only in the preservation of their lives, but in procuring themselves food. A fox, which had been frequently hunted in Leicestershire, was always lost at a particular place, where the hounds could never recover the scent. This circumstance having excited some curiosity, it was discovered that he jumped upon, and ran along a clipped hedge, at the end of which was an old pollard oak tree, hollow in the middle. He crept into this hollow, and lay concealed till the alarm was over. His retreat, however, being discovered, he was driven from it and killed. Another fox selected a magpie's nest as a place of retreat, and was discovered in consequence of a labouring man having observed a quantity of bones, feathers of birds, &c., on the ground under the nest. The following fact may be relied upon, extraordinary as it may appear. I received it from a gentleman of the strictest veracity, who communicated it to me very recently, on his return from the south of France, where he had been residing for some months. A friend of his, with whom he passed much of his time there, was in the habit of shooting in a part of the country where there was much wild and rocky ground. Part of this rocky ground was on the side of a very high hill, which was not accessible for a sportsman, and from which both hares and foxes took their way in the evening to the plain below. There were two channels or gullies made by the rains, leading from these rocks to the lower ground. Near one of these channels, the sportman in question, and his attendant, stationed themselves one evening, in hopes of being able to shoot some hares. They had not been there long, when they observed a fox coming down the gully, and followed by another. After playing together for a little time, one of the foxes concealed himself under a large stone or rock, which was at the bottom of the channel, and the other returned to the rocks. He soon, however, came back, chasing a hare before him. As the hare was passing the stone where the first fox had concealed himself, he tried to seize her by a sudden spring, but missed his aim. The chasing fox then came up, and finding that his expected prey had escaped, through the want of skill in his associate, he fell upon him, and they both fought with so much animosity, that the parties who had been watching their proceedings came up and destroyed them both.

* * *

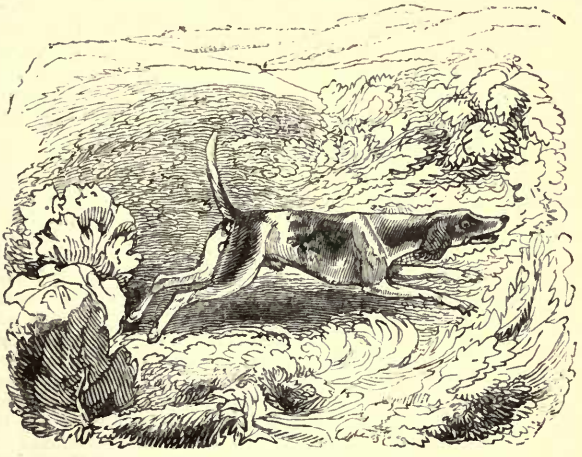
Stratagems of foxes to take water-fowl.—Amongst the devices of the fox to catch his prey, is that of sliding under water like a frog, only leaving his nostrils above the surface to take breath, in such places as that described by White, where he has observed water-fowl resort. This appears to me to have given origin to a curious legend which I have

traced to Albertus Magnus, the celebrated naturalist of the middle ages. "When the fox," says he, "is troubled with gnats or fleas, he taketh a mouthful of straw or soft hay, or hair, and so goeth into the water, dipping his hinder parts by little and little, then the insects betake themselves to his head, which he keepeth out of the water, which the fox feeling, dippeth or diveth also the same under water to his mouth, wherein he holdeth the hay as aforesaid, whereunto the flies run for sanctuary or dry refuge, which the fox perceiving, suddenly casteth it out of his mouth, and runneth out of the water, by this means easing himself of all those enemies."—*Jesse—Buffon—White of Selborne—Sporting Anecdotes.*

FOXCASE, *s.* A fox's skin.

FOXCHASE, *s.* The pursuit of the fox with hounds.

FOXHOUND (*Canis celer*), *s.* A hound famous for the pursuit of foxes.



The muzzle of the fox-hound is rather long, and his head small in proportion to his body; his ears long and pendulous, though not so much as those of the blood-hound or stag-hound. His legs are very straight, his feet round and not too large, his chest deep, and breast wide, his back broad, his neck thin, his shoulders lie well back, his tail thick and bushy, and carried high when in the chase. His colour is generally white, variously patched with black in different parts of the body.

Mr. Daniel makes the following remarks on the choice of hounds. Most sportsmen have their prejudices as to the colour of their dogs. In an old distich it is said.

"So many men, so many minds,
So many hounds, so many kinds;"

and the choice of hounds in former times, as to colour and other points, is no bad commentary upon it; for we are gravely told, that white coloured dogs, especially those that were pupped without any spot upon them, although not generally good for all sorts of game, were excellent for the stag; that people from experience valued them, because of their natural instinct, being curious hunters, with admirable noses, and very good at stratagems; and, moreover, that they were less subject to diseases, by reason of a predominancy of phlegm which gave them a good temperament of body.

Black hounds were not to be rejected, especially when marked with white and not red spots, the whiteness proceeding from the phlegmatic constitution, which was supposed to ensure memory. They were at the same time more obedient, and were said to be good hunters, not frightened at water and so hardy as seldom to require the doctor.

Grey coloured hounds (supposing all suspicion of mongrelism to be removed) were to be coveted, on account of their cunning, never faltering, nor being discouraged in their quest. It is allowed that their noses were not the best, but being indefatigable, they pushed themselves forward; and it is presumed, from the above failing, that nine times out of ten they did more harm than good.

Yellow hounds, which are defined to be those having red hair, inclining to brown, possess too much choler to be much prized; were too giddy and resolute to hunt any animals that turned too much in their chase; were with difficulty taught, and not easily corrected; and, from their impatient temper, which hurried them beyond their strength, were very liable to diseases.

No country in Europe can boast of fox-hounds equal in swiftness, strength and agility, to those of Britain, where the utmost attention is paid to their breeding, education, and food. The climate also seems congenial to their nature; for, when taken to France or Spain, and other southern countries of Europe, they quickly degenerate, and lose all the admirable qualities they possess in this country:

In thee alone, fair land of liberty,
Is bred the perfect hound in scent and speed
As yet unrivall'd, while in other climes
Their virtue fails,—a weak degenerate race.

SOMERVILLE.

* * *

It is a trait in our national character to be fond of hunting. It was the occupation of our forefathers from the remotest posterity, and seems to have descended, with even increased ardour, down to the present day. Certainly there is no country that can boast of such expensive and convenient receptacles for the maintenance of fox-hounds as Great Britain. The kennel of the Duke of Richmond, at Goodwood, cost 19,000*l.* and Mr. Noel's pack of hounds was sold to Sir William Lowther, Bart. for the large sum of 1,000 guineas.

* * *

The chief excellence in a pack of fox-hounds is the head they carry, taken collectively; and on this and the fineness of their noses depend their speed. Mr. Beckford says, "that hounds should go, like the horses of the sun, all abreast." Five and twenty couple are a sufficient force at any time to be taken into the field; they are a match for any fox, supposing them steady and their speed nearly equal: too heavy dogs always do more mischief than service. Hounds that are meant to run well together should never have too many old ones amongst them. Five or six seasons are sufficient to destroy the speed of most dogs, although this depends much on constitution. We are informed of a spayed bitch, called Lilly, which ran at the head of Mr. Paxton's harriers at Newmarket, for five seasons; a singular instance of undiminished speed.—*Daniel—Beckford—Brown.*

FOXHUNTER, *s.* A man whose chief ambition is to show his bravery in hunting foxes.

FOXTRAP, *s.* A gin or snare to catch foxes.

FRACTURE, *s.* Separation of continuous parts; the breaking of a bone.

FRACTURE, *v.* To break a bone.

FRINGILLA (*Illiger*), *s.* The finch, a genus thus characterised:—

Bill straight and perfectly conical, short, hard, and sharp at the point; the ridge of the upper mandible rounded, and frequently advancing in an angle upon the forehead, the cutting edges of the under mandible bending a little inwards. Nostrils situated behind the horny bulging base of the bill, round, and hidden by the small frontal feathers. Wings short, having the third or fourth quill-feather the longest. Legs with the shank as short as, or shorter than, the middle toe, and with the toes divided.—*Montagu.*

FROG, *s.* A small animal with four feet, of the amphibious kind; the hollow part of the horse's hoof. *Vide* FEET.

FROST, *s.* The last effect of cold, the power or act of congelation.

FROSTBITTEN, *a.* Nipped or withered by the frost.

This effect of frost upon birds, took place in February, 1809, when a boy in the service of Mr. W. Newman, miller, at Legbourne, near Malling, went into a field, called the Forty Acres, and saw a number of rooks on the ground, very close together. He made a noise to drive them away, but they did not appear alarmed; he threw snow-balls to make them rise, still they remained. Surprised at this apparent indifference, he went in among them, and actually picked up twenty-seven rooks, and also in several parts of the same field, ninety larks, a pheasant, and a buzzard hawk. The cause of the inactivity of the birds, was a thing of rare occurrence in this climate; a heavy rain fell on Thursday afternoon, which, freezing as it came down, so completely glazed over the bodies of the birds, that they were fettered in a coat of ice, and completely deprived of the power of motion. Several of the larks were dead, having perished from the intenseness of the cold. The buzzard hawk being strong, struggled hard for his liberty, broke his icy fetters, and effected his escape.

Frostnail, *s.* A nail with a prominent head driven into the horse's shoes, that it may pierce the ice.

Fry, *s.* The swarm of little fishes just produced from the spawn; any swarm of animals.

Fulica, (Brisson,) *s.* The coot, a genus thus characterised:—

Bill of middle size, strong, conical, straight, compressed, higher than broad at the base; ridge advancing upon the forehead, and expanding into a naked plate; points of both mandibles compressed and of equal length, the upper slightly curved, and widened at the base. Nostrils at the side, in the middle of the bill, slit lengthwise, half closed by a membrane which covers the widening, pierced from part to part. Legs long, slender, naked above the knee; three toes before and one behind; all the toes very long, and re-united at their base, and furnished on the sides with a scallopped membrane. Wings of middle size, the first quill shorter than the second and third, which are the longest in the wing.—*Montagu.*

Fulvous, *a.* A colour which may be described as brownish.

Fumigate, *v.* To smoke, to perfume by smoke or vapour; to medicate or heal by vapours.

Fumigation, *s.* Scents raised by fire; the application of medicines to the body in fumes.

Fumigations are used to prevent the spreading of epidemic distempers. When a stable is contaminated with glanders, the best means are to remove litter, hay, dust, &c., carefully, as well as the pail, collar, and every thing belonging to the infected horse. The rack and manger are to be well scraped, and afterwards washed with hot water and soft soap.

After this, the manger, &c. should be well washed with water; the floor or pavement of the stall is also to be carefully washed and swept, and finally the whole to be washed with slaked lime, and a solution of glue. Before horses are admitted into the stable, the following fumigation may be employed; the number of pans in which the materials are placed being adapted to the size of the stable.

Common salt	8 oz.
Magnesia, powdered	6 oz.

Let them be well mixed, and placed in an earthen dish; then pour on, gradually, four ounces of sulphuric acid. As soon as the latter is added, shut the door and windows. During the whole day the stable door and windows are to be kept shut; but at night they may be thrown open, that there may be no danger in entering the stable the next morning.—*White.*

Fundament, *s.* The back part of the body; the aperture from which the excrements are ejected.

Fungus, *s.* Strictly a mushroom; a word used to express such excrescences of flesh as grow out upon the lips of wounds, or any other excrescence from trees or plants not naturally belonging to them.

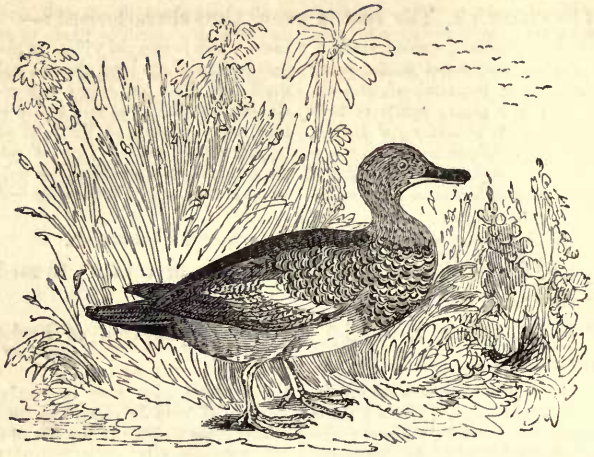
Fur, *s.* Skin with soft hair, with which garments are lined for warmth; soft hair of beasts found in cold countries; hair in general.

Fuse, *v.* To melt, to put into fusion.

Fusil, *s.* A firelock, a small neat musket.

Fustian, *s.* A kind of cloth made of linen and cotton.

Fustic, *s.* A sort of dye-wood brought from the West Indies.



GADWALL.

GADFLY, *s.* A fly that stings cattle.

GADWALL, or GRAY, (*Anas strepera*, LINN.; *Le Chipeau*, BUFF.), *s.* a bird.

The gadwall is less than the mallard, measuring about nineteen inches in length, and twenty-three in breadth.

Birds of this species breed in the desert marshes of the north, and remain there throughout the spring and summer. On the approach of winter they leave the European and Siberian parts of Russia, Sweden, &c., and, aided by the first strong north-east wind, commonly make their appearance about the month of November, on the French, British, and other more southern shores, where they remain till the end of February, and then return to their northern haunts. They are very shy and wary birds, feeding only in the night, and lurking concealed among the rushes in the watery waste during the day, in which they are seldom seen on the wing.

These birds show themselves expert in diving as well as in swimming, and often disappoint the sportsman in his aim; for the instant they see the flash of the pan, they disappear, and dive to a distant secure retreat.—*Bewick.*

GAFF, *s.* A harpoon, or large hook.

GAGGLE, *v.* To make a noise like a goose; *s.* a flock of geese.

GALBANUM, *s.* A kind of gum.

GALL, *s.* The bile, an animal juice remarkable for its supposed bitterness; the part which contains the bile; any thing extremely bitter; a slight hurt by fretting off the skin; an astringent medicine.

Galls are lacerations occasioned by the too tight pressure and friction of an uneasy and ill-fitted saddle, or heavy harness. They are seldom seen with either the judicious or enlightened; experience having taught both how to appreciate prevention. The prudent sportsman will never take his horse to the field, nor the humane driver his carriage-

horse to the road, till personal examination has convinced him the necessary apparatus is not only firm, but proportionably easy; and this should become the more predominant in memory because it is natural to conclude, no man existing would, by neglect or inattention, give pain to the very animal from whose exertions he is to derive his own pleasure.

Injuries of this description, if unexpectedly sustained, should be immediately attended to; a repetition, and that so soon, upon the part so injured, is frequently productive of trouble, expense, loss of time, and disappointment. When the side of a horse is galled, as it sometimes is, by the girth buckle having been most improperly placed upon the edge of the pad, it is not unlikely, for want of early or proper attention, to terminate in a sitfast, and then can only be completely cured by extirpation with the knife. The withers being affected in the same way, and the saddle, or harness, continued in use, by which the injury is originally occasioned, the foundation of fistula may be laid, and will be likely to ensue. In all slight and superficial galls, two or three moistenings of the part with cold vinegar, will allay the inflammation, and harden the surface; but where the long-continued heat and friction has occasioned a destruction of parts, it must be dressed and managed as a wound, which can only be completely cured by incarnation.—*White.*

GALL, *v.* To hurt by fretting the skin.

GALLINACEOUS BIRDS, *s.*

A large portion of these seem to have left their native woods to crowd around the dwellings of man, where, subservient to his purpose, they subsist upon the pickings of the farm-yard, the stable, or the dung-hill; a cheerful, active race, which enliven and adorn the rural scene, and require no other care than the fostering hand of the house-wife to shelter and protect them. Some kinds, such as the partridge, the pheasant, and the like, are found only in cultivated places, at no great distance from the habitations of men; and, although they have not submitted to his dominion, they are nevertheless subject to his controlling power, and are the objects of his keenest pursuit: whilst others, taking a wider range, find food and shelter in the deepest recesses of the woods and forests, sometimes subsisting upon wild and heathy mountains, or among rocks and precipices the most difficult of access.

The characters of the gallinaceous genus are generally well known: most of the species are distinguished above all others for the whiteness of their flesh; their bodies are large and bulky, and their heads comparatively small; the bill in all of them is short, strong and somewhat curved; their wings are short and concave, and scarcely able to support their bodies, on which account they seldom make long excursions: their legs are strong, and are furnished with a spur or a knob behind.

Birds of this kind are extremely prolific and lay a great number of eggs: the young follow the mother as soon as hatched, and immediately learn to pick up the food, which she is most assiduous in showing them; on this account she generally makes her nest on the ground, or in places easy of access to her young brood.

The habitudes of the domestic breed of poultry cannot possibly escape observation; and every one must have noticed the fierce jealousy of the cock. It should seem that this jealousy is not confined to his rivals, but may sometimes extend to his beloved female; and that he is capable of being actuated by revenge, founded on some degree of reasoning concerning her conjugal infidelity. An incident which happened at the seat of Mr. B—, near Berwick, justifies this remark. "My mowers," says he, "cut a partridge on her nest, and immediately brought the eggs (fourteen) to the house. I ordered them to be put under a very large beautiful hen, and her own to be taken away. They were hatched in two days, and the hen brought them up perfectly well till they were five or six weeks old. During that time they were constantly kept confined in an outhouse, without having been seen by any of the other poultry. The door happened to be left open, and the cock got in. My housekeeper, hearing her in distress, ran to her assistance, but did not arrive in time to save her life; the cock, finding her with the brood of partridges, fell upon her with the utmost fury, and put her to death. The housekeeper found him tearing her both with his beak and spurs, although she was then fluttering in the last agony, and incapable of any resistance. The hen had been, formerly, the cock's greatest favourite. —*Bewick.*

GALLINULA (LATHAM), *s.* A genus thus characterised:—

Bill shorter than the head, compressed, conical, higher than broad at the base; ridge advancing upon the forehead and dilating in some species into a naked plate; point of both man-

dibles compressed, and of equal length; the upper slightly curved, the nasal groove very large, the under forming an angle. Nostrils at the sides, in the middle of the bill, slit lengthways, half shut by a membrane which covers the nasal groove, and pierced from part to part. Legs long, naked above the knee; three toes before and one behind, the fore toes long, divided, and furnished with a very narrow border. Wings of middle size, the first quill shorter than the second and third, which are the longest in the wing. The latter does not hold in some foreign species.—*Montagu.*

GALLOP, *v.* To move forward by leaps, so that all the feet are off the ground at once; to move fast.

Gallop is one pace of the horse, well known by that general name; though it will admit of gradational distinctions. A canter is the slowest gallop, in which a horse bears most upon his haunches, but lightly on the bit: it is a pace which spirited good-tempered horses seem to enjoy, and is peculiarly calculated for the accommodation of a lady. A rating gallop is the increase of action to such pace as the peculiar horse may or can go with ease at his rate in common strokes, without being exerted to speed; and this is the hunting gallop of thorough-bred horses, who will always lay by the side of hounds at it, without being in the least distressed. A brushing gallop upon the turf, implies an increased degree of velocity, but not equal to utmost speed.—*Taplin.*

GALLOP, *s.* The motion of a horse when he runs at full speed.

GALLOPER, *s.* A horse that gallops.

GALLOWAY, *s.* A horse not more than fourteen hands high.

Galloway is the name given to that useful kind of small horse from thirteen to fourteen hands high; they are rarely to be seen of exact symmetry, uniform strength, and adequate action; but, if well bred, their qualifications and endurance of fatigue exceed description.

GAMBET, (*Fringa Gambetta*, LINN.; *La Gambette*, BUFF.) *s.* A bird.

This is the Chevalier Rouge of Brisson, and the Red-legged Horseman of Albin. For want of a specimen of this bird, the following description is borrowed from Latham:—

"Size of the Greenshank: length twelve inches, bill of a reddish colour, with a black tip; the irides yellowish green; head, back, and breast cinereous brown, spotted with dull yellow; wing coverts and scapulars cinereous, edged with dull yellow; prime quills dusky; shaft of the first white; tail dusky, bordered with yellow; legs yellow. This inhabits England, but is not common; has been shot on the coast of Lincolnshire. Known in France; but is there a rare bird. Has a note not unlike the whistle of a woodcock; and the flesh is esteemed. Inhabits Scandinavia and Iceland; called in the last Stelkr. It has also been taken in the Frozen Sea between Asia and America."—*Bewick.*

GAMBREL, *s.* The hind leg of a horse.

GAME, *s.* Sport of any kind; jest, opposed to earnest; merriment; a single match at play; field sports, as the chase; animals pursued in the field.

In choosing game, young birds may be distinguished by the softness of their quills, which in older ones will be hard and white. The females are, in general, preferable to the males; they are more juicy, and seldom so tough. For example, a hen pheasant or a duck is to be preferred to a cock pheasant or mallard. The old pheasants may be distinguished by the length and sharpness of their spurs, which, in the younger ones, are short and blunt. Old partridges are always to be known, during the early part of the season, by their legs being a pale blue, instead of a yellowish brown; so that, when a Loudoner receives his brace of blue-legged birds in September, he should immediately snap their legs, and draw out the sinews, by means of pulling off the feet, instead of leaving them to torment him, like so many strings, when he would be wishing to enjoy his repast. This remedy of making the leg tender removes the objection to old birds, provided the weather will admit of their being sufficiently kept; and indeed they are then often preferable, from having a higher flavour.

If birds are overkept their legs will be dry, their eyes much sunk, and the vent will become soft and somewhat discoloured. The

first place to ascertain if they are beginning to be high is the inside of their bills, where it is not amiss to put some heather straw or spice, if you want them to keep for any length of time. Birds that have fallen in the water, or have not had time to get cold, should never be packed like others, but sent openly, and dressed as soon as possible.

* * *

A peculiar culinary mode of perfuming their birds was observed at the table of the King of Tunis, who landed at Naples to have an interview with Charles the Emperor. They were stuffed with odoriferous drugs and spices to such an expense, that the cooking of one peacock and two pheasants, dressed after this fashion, amounted to a hundred ducats, and when they were carved, not only the dining-room, but all the apartments of his palace, and even the adjoining streets, were filled with the aromatic vapour, which was not presently dispersed.—*Hawker—Daniel.*

GAMECOCK, *s.* A cock bred to fight.

GAME-EGG, *s.* An egg from which fighting cocks are bred.

GAMEFOWL, *s.* Game cocks and hens.

Game fowls are too well known to require a particular description. Their plumage, particularly the red, is most beautiful and rich; their size somewhat below the common, and their symmetry and delicacy of limbs to be compared with those of the race-horse and the deer, or in more strict analogy, with the wild species of their own genus. The ancients kept gamecocks for the same purpose as the moderns, and there is a game breed at present existing in India; but I have not hitherto obtained any information as to the origin of our game breed, which has been established during many centuries in this country. Their flesh is of the most beautiful white, and superior to that of all other breeds of domestic fowls, for richness and delicacy of flavour; but the extreme difficulty of rearing the chickens, from their natural pugnacity of disposition, which shows itself at the earliest possible period, deters most breeders, excepting those who breed for the cock-pit. I have many times had whole broods, scarcely feathered, stone-blind from fighting, to the very smallest individuals; these rival couples moping in corners, and renewing their battles on obtaining the first ray of light. On this account few can be reared, and as this disposition, to a certain degree, prevails in the half-bred, it prevents crossing with the game cock, otherwise a great improvement. The game eggs are smaller than common, finely shaped, and extremely delicate.

Philanthropists are in the habit of declaiming much against the practice of cock-pit battles, but, on reflection, the cruelty of that sport will be found among the least, wherein the feelings of animals are concerned; since fighting, in the gamecock, is a natural and irresistible passion, and can never take place against his will; and since those engaged in regular combat upon the arena would do so voluntarily, and with equal ardour, did they meet in the desert. Another and similar mistake is the supposed additional cruelty of arming the heels of the cock with steel, which, on the contrary, conduces to shorten the period of their sufferings.—*Moubray.*

GAMEKEEPER, *s.* A person who looks after game, and sees it is not destroyed.

Gamekeepers are subject to the full penalties of unqualified and unlicensed persons, as well as to actions of trespass, if they outstep the bounds of the manor for which they are appointed.

Only one can be appointed to each manor.

Deputation of a Gamekeeper.—The deputation granted to a gamekeeper must be registered with the clerk of the peace, within twenty days after it was granted, and a certificate taken of the same, under penalty of 20*l.* The deputation for one gamekeeper holds good till another is appointed. If a new gamekeeper is appointed within the year, the game certificate of the former keeper, may be transferred to him for the remainder of the year, and this must be done free of all expense, by the clerk to the commissioners of the district.

Form of a Deputation.—(To be written on a 1*l.* 15*s.* stamp).

Know all men, by these presents, that I of , in the county of , Esquire, lord of the manor of , in the same county, have nominated, deputed, and appointed, and by these presents do nominate, depute, and appoint of , yeoman, to be gamekeeper of and within my said manor of with full power, license, and authority to pursue, take, and kill any hare, pheasant, partridge, or other game whatsoever, in and upon my said manor of , for my sole and immediate use and benefit, and also to take and seize all such guns, bows, greyhounds, setting dogs, lurchers, ferrets, trammels, lowbells, trays, or other nets, harepipes, snares, or other engines, for the pursu-

ing, taking, or killing of hares, rabbits, pheasants, partridges, or other game, as shall be used within the precincts of my said manor, by any person or persons, who by law are prohibited to keep or use the same. In witness whereof I have hereunto set my hand and seal this day of , 18

(Signature and seal.)

Sealed and delivered in presence of

(The signature of one witness, specifying his place of abode, is sufficient).

GAME-LAWS, *s.*

Hares may be killed at any time of the year. Pheasants from the 1st of October to the 1st of February. Partridges from the 1st of September to the 1st of February; penalty for killing them at other times 5*l.* Grouse from the 12th of August to the 10th of December. Black game (in Devonshire, Somersetshire, and the New Forest) from the 1st of September to the 10th of December. Black game (everywhere else) from the 20th of August to the 10th of December. Bustards from the 1st of September to the 1st of March; penalty for killing at other times 20*l.*, or not less than 10*l.*, for the first offence, and for every subsequent offence 30*l.*, or not less than 20*l.*

Any person taking or killing game on Sundays or Christmas-days to forfeit, for the first offence, not more than 20*l.* nor less than 10*l.*; for the second offence from 30*l.* to 20*l.*, and for the third and every subsequent offence 50*l.*

An unqualified person, killing, can only be convicted of one penalty in a day. That is, an unqualified person, or even a poacher, would have no more to pay for killing fifty head of game in the same day, than he would for killing one. Though the poacher, or unqualified person, would be liable to the other penalties, viz. 5*l.* each for every head of game which he sold, offered for sale, or which had even been found in his possession; and if a dog or gun (or any other engine) was used in the destruction of game, he would also be liable to 20*l.* penalty, provided he had not taken out a sporting certificate.

If a person go in pursuit of game with a dog and gun, he can only be charged with one offence, and convicted in one penalty for both. (7 Term Reports, 152.)

Killing from seven o'clock at night to six in the morning, between the 12th of October and 12th of February, and from nine at night to four in the morning, from the 12th of February to the 12th of October, (besides the other penalties before named) first offence, not more than 20*l.* nor less than 10*l.*; second offence from 30*l.* to 20*l.*; third and subsequent, 50*l.*

Servant of a lord of a manor may kill, and yet the lord of the manor may not, unless he is qualified.

Informations for penalties, relative to the game laws, should be brought so far as the conviction to take place within three months.

A penalty may be either recovered by information before a justice of peace, or sued for in any of the courts of record at Westminster. In the latter case, the action must be brought within six months after the offence committed.

Rabbits, woodcocks, snipes, quails, and landrails, are made game only so far as relates to shooting them, for which, therefore, a certificate is required; but one without a certificate may catch, sell, or have them in his possession.

Wild fowl any one may shoot on the coast, from a public path, &c., &c.

A person, with neither qualification nor license, has a right to carry a gun, provided he does not use it for the destruction of game.

GAME, PRICE OF.

	Anno, 1512.	*Anno*, 1833.
Crane,	Sixteen pence.	
Heron,	Twelve pence.	Three to four shillings.
Mallard,	Two pence.	Three to five shillings.
Teal,	One penny.	Two shillings, to three shillings.
Widgeon,	One penny.	Eighteen pence to three shillings.
Shoveller,	Sixpence.	
Woodcock,	One penny or three half-pence.	Three to ten shillings.
Lapwing,	One penny.	Nine pence to a shilling a couple.
Sea gulls, (black-headed gulls,)		One penny to three half-pence.
Sturts, (purrs,)	Sixpence a dozen.	Three pence each.
Quail,	Two pence.	Two to three shillings.
Snipes,	Three pence a dozen.	One shilling to two shillings each.

	Anno, 1512.	*Anno*, 1833.
Partridge,	Two pence.	Eighteen pence to three shillings.
Redshank,	One penny.	One shilling to fifteen pence.
Bittern,	Twelve pence.	Five to seven shillings.
Pheasant,	Twelve pence.	Four to eight shillings.
Rey, (land rails,)	Two pence.	Two to five shillings.
Curlew,	Twelve pence.	Two shillings (stone curlew three shillings).
Peacock,	Twelve pence.	Ten to twenty shillings.
Ruffs and Reeves,		Four shillings if fatted, one shilling to two shillings if shot.
Knot,	One penny.	Two to three shillings.
Dottrell,	One penny.	Two shillings each.
Bustard,		One to three guineas.
Terns,	Four pence a dozen.	
Small Birds,	Twelve pence a dozen.	

GAMMON, *s.* The buttock of a hog salted and dried; a term at backgammon for winning the game.

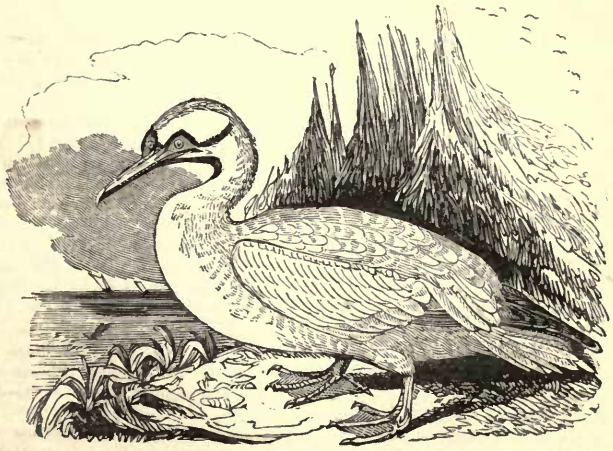
GANDER, *s.* The male of the goose.

GANGRENE, *s.* A mortification, a stoppage of circulation followed by putrefaction.

GANGRENE, *v.* To corrupt to mortification.

GANGRENOUS, *a.* Mortified, or betokening mortification.

GANNET, GAN, SOLAND, or SOLAN GOOSE, (*Pelicanus bassanus*, LINN.; *Le Fou de Bassan*, BUFF.) *s.*



The gannet is generally about seven pounds in weight, three feet in length, and six in breadth. The bill is of a pale or lead-coloured blue, six inches long, a little jagged on the edges, strong and straight to the tip, which is inclined a little downwards; the upper bill is furnished with a distinct rib or ridge, running along from the tip nearly to its base, on each side of which it is furrowed, without any visible appearance of nostrils; the tongue is

small, and placed far within the mouth, all the inside of which is black; a darkish line passes from the brow over the eyes, which are surrounded with a naked blue skin, and, like those of the owl, are set in the head so as to look nearly straight forward, and the extreme paleness of the irides gives them a keen wild stare. The gape of the mouth is very wide, and seems more lengthened by a slip of naked black skin, which is extended on each side from the corners beyond the cheeks; these features of its countenance, altogether give it the appearance of wearing spectacles. A loose black, bare, dilatable skin, capable of great distension, hung from the blades of the under bill, and extended over the throat, serves it as a pouch to carry provisions to its mate or its young. The body is flat and well clothed with feathers; the neck long; the crown of the head, nape, and, in some specimens, the hinder part of the neck, are of a buff colour; greater quills and bastard wings black, and the rest of the plumage white. The tail is wedge-shaped, and consists of twelve tapering sharp-pointed feathers, the middle ones the longest. The legs and feet are nearly of the same colour and conformation as those of the cormorant, but they are curiously marked by a pea-green stripe, which runs down each shin, and branches off along every one of the toes. The male and female are nearly alike, but the young birds, during the first year, appear as if they were of a distinct species, for their plumage is then of a dusky colour, speckled all over with triangular white spots.

The female makes her nest in the caverns and fissures, or on the ledges of the lowering precipice, as well as on the plain surface of the ground; it is formed of a great quantity of withered grasses and sea-weeds of various kinds, gathered with much labour from the barren soil, or picked up floating about upon the water. She lays three eggs, of a white colour, and somewhat less than those of a goose, although ornithologists assert that she will lay only one egg, if left to herself undisturbed, and that when this egg is taken away she then lays a second, and in like manner a third, which she is generally permitted to hatch, and rear the young one.

The male and female hatch and fish by turns; the fisher returns to the nest with five or six herrings in its gorget, all entire and undigested, which the hatcher pulls out from the throat of its provider, and swallows them, making at the same time a loud noise.

These birds are common on the coasts of Norway and Iceland, and are said to be met with in great numbers about New Holland, and New Zealand; they breed also on the coasts of Newfoundland, and migrate southward along the American shores as far as South Carolina; they are noticed, indeed, by navigators, as being met with, dispersed over both hemispheres, which are probably one great family spread over the whole globe; but their greatest known rendezvous is the Hebrides and other solitary rocky isles of North Britain, where their nests, in the months of May and June, are described as so closely placed together, that it is difficult to walk without treading upon some of them; and it is said that the swarms of the old birds are so prodigious. that when they rise into the air, they stun the ear with their noise, and overshadow the ground like the clouds.

At the small island of Borea, Martin says, "The heavens were darkened by those flying above our heads; their excrements were in such quantity, that they gave a tincture to the sea, and at the same time sullied our boat and clothes." Besides this small island of Borea, and St. Kila, noticed by Martin, Pennant and other writers mention the isle of Ailsa, in the Frith of Clyde; the Stack of Souliskerry, near the Orkneys; the Skellig Isles, off the coast of Kerry, Ireland; and the Bass Isle, in the Frith of Forth. This last-mentioned isle is farmed out at a considerable rent, for the eggs of the various kinds of water-fowl with which it swarms; and the produce of the solan geese forms a large portion of this rent; for great numbers of their young ones are taken every season, and sold in Edinburgh for about twenty-pence each, where they are esteemed a favourite dish, being generally roasted, and eaten before dinner. On the other bleak and bare isles, the inhabitants, during a great part of the year, depend for their support on these birds and their eggs, which are taken in amazing quantities, and are the principal articles of their food. From the nests placed upon the ground the eggs are easily picked up one after another, in great numbers, as fast as they are laid; but in robbing the nests built in the precipices, chiefly for the sake of the birds, the business wears a very different aspect: there, before the dearly earned booty can be secured, the adventurous fowler, trained to it from his youth, and familiarised to the danger, must first approach the brow of the fearful precipice, to view and to trace his progress on the broken pendent rocks beneath him: over these rocks, which (perhaps a hundred fathoms lower) are dashed by the foaming surge, he is from a prodigious height about to be suspended. After addressing himself in prayer to the Supreme Disposer of events, with a mind prepared for the arduous task, he is let down by a rope, either held fast by his comrades, or fixed into the ground on the summit, with his single cord, his pole-net, his pole-hook, &c; and thus equipped, he is enabled, in his progress, either to stop, to ascend or descend, as he sees occasion. Sometimes by

swinging himself from one ledge to another, with the help of his hook, he mounts upwards, and clambers from place to place; and, at other opportunities, by springing backwards, he can dart himself into the hollow caverns of the projecting rock, which he commonly finds well stored with the objects of his pursuit, whence the plunder, chiefly consisting of the full-grown young birds, is drawn up to the top, or tossed down to the boat at the bottom, according to the situation, or concurring circumstances of time and place. In these hollows he takes his rest, and sometimes remains during the night, especially when they happen to be at such vast and stupendous heights. To others of less magnitude the fowlers commonly climb from the bottom, with the help of their hooked poles only, by which they assist, and push or pull up each other from hold to hold, and in this manner traverse the whole front of the frightful scar. To a feeling mind the very sight of this hazardous employment, in whatever way it is pursued, is painful; for, indeed, it often happens that these adventurous poor men, in this life-taking mode of obtaining their living, slip their hold, are precipitated from one projection to another, with increasing velocity, and fall mangled upon the rocks, or are for ever buried in the abyss beneath.

* * *

The sailors sometimes catch these birds by fastening a fresh herring on a floating plank, against which the gannet's neck is broken, when furiously pouncing on his prey.—
Bewick—Martin.

GARGANEY, (*Anas querquedula*, LINN.; *Le Sarcelle*, BUFF.) *s.*

This species, which is only a little bigger than the teal, is clothed with an elegant plumage, and has altogether a most agreeable and and sprightly look. It measures about seventeen inches in length, and twenty-eight in breadth. The bill is of a dark lead colour, nearly black; the irides light hazel. From the crown of the head, over the nape of the neck downwards, it is of a glossy brown, chin black; brow, cheeks, and the upper fore part of the neck, reddish chestnut, with vinous reflections, and sprinkled all over with numerous small pointed white lines. A white stripe passes over each eye, and slanting backwards, falls down on each side of the neck, the lower part of which, with the breast, is light brown, pretty closely crossed with semicircular bars of black; the shoulders and back are marked nearly the same, but on a darker ground: the scapulars are long and narrow, and are striped with ash-colour, black, and white. The belly in some, is white; in others, pale reddish yellow; the lower part of it, and the vent, mottled with dusky spots; the sides are freckled and waved with narrow lines of ash-coloured brown, more and more distinctly marked towards the thighs; behind which, this series of feathers terminates in a riband, striped with ash, black, white, and lead-coloured blue.

The coverts of the wings are of an agreeable bluish ash, margined with white; next to this, the exterior webs of the middle quills are glossy green, tipped with white, and form the beauty-spot or spangle of the wings, to which

the white tips make a border; the primary quills are ash-brown, edged with white; tail dusky; legs lead colour. The foregoing description was taken from a male bird in full and perfect plumage. This sex is furnished with a labyrinth.

The female has an obscure white marked over each eye; the rest of the plumage is of a brownish ash colour, not unlike the female teal; but the wing wants the green spot, which sufficiently distinguishes these birds.

It has not yet been noticed whether any of this species ever remain to breed in England, where, indeed, they are rather a scarce bird. —*Bewick.*

GARGLE, *v.* To wash the throat with some liquor not suffered immediately to descend.

GARGLE, *s.* A liquor with which the throat is washed.

GARLICK, *s.* A plant, sometimes used in chronic cough.

GARRAN, *s.* A small horse, a hobby; a wretched horse. (*An Iricism.*)

GASH, *v.* To cut deep, so as to make a gaping wound.

GASH, *s.* A deep and wide wound; the mark of a wound.

GASP, *v.* To open the mouth wide to catch breath; to emit breath by opening the mouth convulsively.

GASP, *s.* The act of opening the mouth to catch breath; the short catch of the breath in the last agonies.

GATE, *s.* A frame of timber upon hinges to give a passage into enclosed grounds; a moveable part of a fence made of iron or timber.

GAUDY, *a.* Showy, splendid, tinselled.

GAUGE, *s.* A measure, a standard.

GAUNT (*Podiceps cristatus*, LATHAM), *s.* A species of bird.

A full-grown male gaunt weighs between two and three pounds; length about two feet. The bill is two inches and three quarters long, dusky brown along the ridge of the upper mandible and at the point; the rest reddish flesh-colour; irides and lore crimson. The head is much enlarged by a crest of a dusky colour, standing up on each side; the cheeks and throat are surrounded by long feathers of a ferruginous colour; from the bill to the eye is a black line, above which is a white one; the chin is white; the hind part of the neck, and upper part of the body and wings, dusky brown; the under part of the neck, breast, and all beneath, beautiful glossy white; the primary quill-feathers dusky; some of the inner ones tipped with white, the rest are nearly all white, which, when the wing is closed, makes an oblique bar of that colour across it; legs dusky on the outside; some wholly dusky green.

This bird is indigenous to England; it breeds in the meres of Shropshire and Cheshire, and in the fens of Lincolnshire. The nest is large, composed of a variety of aquatic plants; it is not attached to any thing, but floats amongst the reeds and flags, penetrated by the water. The female lays four white eggs, about the size of that of a pigeon.—*Montagu.*

GAZEHOUND, *s.* A hound that pursues not by the scent, but by the eye; an ancient name of the greyhound.

GEAR, *s.* Furniture, accoutrements, dress; the traces by which horses or oxen draw; stuff.

GELD, *v.* To castrate, to deprive of the power of generation; to deprive of any essential part. *Vide* CASTRATION.

Castration has a strange effect: it emasculates both man, beast, and bird, and brings them to a near resemblance of the other sex. Thus eunuchs have smooth unmuscular arms, thighs, and legs; and broad hips, and beardless chins, and squeaking voices. Gelt-stags and bucks have hornless heads, like hinds and does. Thus wethers have small horns, like ewes; and oxen large bent horns, and hoarse voices when they low, like cows; for bulls

have short straight horns; and though they mutter and grumble in a deep tremendons tone, yet they low in a shrill high key. Capons have small combs and gills, and look pallid about the head like pullets; they also walk without any parade, and hover chickens like hens. Barrow-hogs have also small tusks like sows.

Thus far it is plain that it puts a stop to the growth of those appendages that are looked upon as its insignia. But the ingenious Mr. Lisle, in his book on husbandry, carries it much farther; for he says, that the loss of those insignia alone has sometimes a strange effect: he had a boar so fierce and amorous, that to prevent mischief, orders were given for his tusks to be broken off. No sooner had the beast suffered this injury than his powers forsook him, and he neglected those females to whom before he was passionately attached, and from whom no fences could restrain him.—*White of Selborne.*

GELDING, *s.* Any animal castrated, particularly a horse.

GELID, *a.* Extremely cold.

GELLY, *s.* Any viscous body; viscidity, glue, gluey substance.

GENDER, *s.* A kind, a sort, a sex.

GENDER, *v.* To beget; to produce, to cause; to copulate, to breed.

GENET, *s.* A small well-proportioned Spanish horse.

GENTLE, *s.* A maggot used in angling.

Those who live in or near London may buy them in proper condition for the day on which they wish to use them, but for the accommodation of those who reside in the country, remote from such convenience, the best modes of breeding them will be here mentioned, in order to prevent disappointment.

Coarse fish, such as chub and roach, may be laid in an earthen pot in the shade, and will soon be fly-blown. When the gentles are of a proper size (but not before), put some oatmeal and bran to them, and in two days they will be well scoured and fit to fish with, in about four more they become hard, assume a pale red colour, and soon after change to flies. The red ones should not be thrown away, as frequently roach and dace take these with a white one in preference to all other baits. Some have recommended a piece of liver suspended by a stick over a barrel of clay, into which the gentles fall and cleanse themselves; but clay will not scour them, and besides they fall from the liver before they have attained their full size. The aforementioned is a less disgusting plan; for a short time after oatmeal and bran are put to the gentles the fish in which they are bred will be found perfect skeletons, and may be thrown away. However, if they are to be bred from liver, it should be scarified deeply in many parts, and then hung up and nearly covered over, as in that way the flies will blow it better than when wholly exposed; in two or three days the gentles will be seen alive. The liver is then to be put into an earthen pan and there remain until the first brood are of full growth, a sufficient quantity of fine sand and bran (letting the liver remain) is then to be put into the pan, and in a few days they will come from the flesh, and scour themselves in it. The liver should then be hung across the pan and the latter brood will soon drop out and be fit for use; and by thus breeding them in October, and keeping them a little warmer than those bred in summer, until they arrive at their full growth, and afterwards putting them in the same pan into a dampish vault, they may be preserved for winter fishing.—*Daniel.*

GENTLE, *a.* Soft, mild, tame, peaceable; soothing; pacific.

GENUS, *s.* In science, a class of beings comprehending under it many species; as quadruped is a genus comprehending under it almost all terrestrial beasts.

GERM, *s.* A sprout or shoot.

GESTATION, *s.* The act of bearing the young in the womb.

GET, *v.* To beget upon a female.

GETTER, *s.* One who procures or obtains; one who begets on a female.

GIBBOUS, *a.* Convex, protuberant, swelling into inequalities; crooked-backed.

GIER-EAGLE, *s. obs.* An eagle of a particular kind.

GIG, *s.* Anything that is whirled round in play; a two-wheeled vehicle; a light boat.

GIGOT, *s.* The hip joint.

GILLS, *s.* The aperture at each side of the fish's head; the flaps that hang below the beak of a fowl; the flesh under the chin.

GILL, *s.* A measure of liquids containing the fourth part of a pint.

GIMP, *s.* A kind of silk twist used in angling.

GIN, *s.* The spirit drawn by distillation from juniper berries and wheat. The Hollands Geneva is principally distilled in the neighbourhood of Rotterdam; English is produced from the oil of turpentine and malt spirits.

GINGER, *s.* An Indian root; the flower consists of five petals, shaped like those of the iris.

There are two sorts kept in the shops; the black and the white ginger: the latter is stronger, and preferred for culinary purposes, on account of its more pleasant flavour, but the former is considered cheaper, easily powdered, and more frequently used as a horse medicine.

I consider ginger as the most useful stimulant in the veterinary materia medica: when joined with aromatics, such as allspice, caraway seed, aniseed, cummin seed, &c., or their essential oils, it forms an efficacious cordial, and with emetic tartar and opium an excellent diaphoretic, for giving gloss to the coat, and relaxing the skin. Joined with bitters, it makes a good stomachic; with squills an expectorant, often relieving obstinate coughs.

Ginger is extremely beneficial in weakness and flatulency of the stomach; and assisted by other remedies, such as warm beer, it seldom fails of curing the flatulent colic, or gripes. *See* CARMINATIVES.

The dose is from one drachm and a half to three drachms.

It should be recently powdered when used; but in a well-stopped bottle the powder may be kept a considerable time without losing its strength.—*White.*

GIZZARD, *s.* The name given to the strong, muscular, and cartilaginous portion of the stomach in birds which feed on grain, which is so different from the membranous stomach of birds of prey (*raptores*). The gizzard receives the food which has previously been taken into the crop.

GLADE, *s.* A lawn or opening into a wood.

GLAIR, *s.* The white of an egg.

GLANCE, *v.* To shoot obliquely.

GLANDERS, *s.* A disease incident to horses.

This is a contagious disorder, and one that is generally thought incurable. The great number of horses that have been destroyed by glanders, especially in the army, and in establishments where great numbers of horses are kept, has excited particular attention to the subject, especially in France and Italy, where many attempts were made, in the beginning of the last century, to discover a remedy for it. Lafosse, an eminent French veterinarian, considered it as a local disease, and thought he had discovered a successful mode of treating it, which consisted in perforating the bones which cover the frontal and nasal sinuses, and injecting through the openings astringent and other liquids. After this opinion had been published, some English farriers made trial of it, and by others detergent lotions were poured into the nostrils; the nose being drawn up for the purpose by means of a pulley. Attempts were also made to cure it by arsenical fumigations, and by burning out the swollen glands under the jaws, or sloughing them out by caustics. The various preparations of mercury, copper, iron, and arsenic, have likewise been tried, and after all the general opinion is that the glanders is incurable.

That the glanders is contagious has been clearly and indisputably proved by numerous experiments; and the manner in which it is

propagated has likewise been satisfactorily demonstrated. At the same time it is generally believed that the glanders takes place also independent of contagion; but from what causes or circumstances it is then produced, no author has attempted to state precisely.

It has been said, in a general way, that close unwholesome stables, hard work, and bad provender, sudden changes from cold and wet weather to hot close stables, hard work, and insufficient keep, and, in short, any thing that will weaken the animal considerably, is likely to produce glanders or farcy. Hence post and stage horses are particularly obnoxious to this disease.

Mr. Russel, of Exeter, had, for many years, some glandered teams of horses constantly working from Plymouth to Exeter. But they were worked with moderation, well fed, and taken great care of. I attended these teams for several years, the horses generally looked well, and in excellent condition. Many of them lasted four or five years; and some fell off after a few months.

The symptoms of glanders are—1st, A discharge of glairy matter from one or both nostrils; generally from one only, and more frequently from the left than from the right nostril. 2d, A swelling of the glands or kernels under the jaw, or between the branches of the lower jaw, and generally on the side of the jaw corresponding with the affected nostril. In all other respects the animal is generally in health, and often sleek and in good condition.

Sometimes, however, the glanders is accompanied by a disorder of the skin, named farcy, and then the horse's general health is often affected. Farcy has been considered, by many authors, as a distinct disorder. I have therefore noticed it in a separate article (see Farcy), though of opinion that it is always a symptom of glanders, whether it appear in a local, or in a constitutional form.

Glanders has been divided into two stages, the acute and the chronic, or the first and second stage. The acute glanders is generally attended with acute farcy, such as chancrous ulceration about the lips, face, or neck, with considerable and painful swellings on different parts, some of the swellings appearing as a corded vein: ulceration and swelling of the hind leg or sheath, or testicles, and sometimes of the fore leg, with corded veins, and farcy buds on the inside of the limb. The acute glanders often spreads rapidly, and either destroys the animal, or renders him such a pitiable and hopeless object, that the proprietor is generally induced to have him knocked on the head.

Chronic glanders is generally very mild in the first stage of the disorder, and does not affect the appetite, or the general health and appearance of the animal. Such horses, when properly fed and taken care of, and worked with moderation, will often continue in regular work for several years.

I have been in the habit of attending several teams of glandered horses since I left the army, and have known them last four or five years. Sometimes, however, they would go off in a few months; and whenever a glandered horse fell off much, and became unequal to his work, he was destroyed. Many glandered horses have been known to get rid of the disorder while working in these teams; and sound horses that have been put in occasionally, to fill up the teams, especially old horses, have escaped the disorder. It is this circumstance, as I have before stated, that has led many to believe that the glanders is not contagious.

The second stage of glanders is marked by ulceration within the nostrils, or an appearance in the matter which indicates ulceration, though sometimes too high up to be seen. The matter is in larger quantity, more glutinous, sticking about the margin of the nostril and upper lips, and sometimes obstructing the passage of air, so that the horse makes a snuffling noise in breathing. The matter is sometimes streaked with blood, and the horse sometimes bleeds from the nostrils in working. When this happens in the first stage of the disorder, however early it may be, it indicates the approach of the second stage. The matter begins to have an offensive smell, which it scarcely ever has in the first stage, though an offensive smell is by many supposed to be a decisive mark of glanders. In the second stage the matter generally runs from both nostrils; the glands under the jaw become larger, harder, and fixed more closely to the jaw-bone. They are also generally more tender than in the first stage; the inner corners of the eyes are mattery. The horse loses flesh and strength, stales more than usual, coughs, and at length dies in a miserable condition, generally farcied as well as glandered. It is with this disease as it was formerly with small pox inoculation, and is now with vaccination. If a person happens to meet with one or two cases, or suppose it were half a dozen, of a horse escaping the glanders after standing in a stable with one that is glandered, he thinks himself fully warranted in concluding that the disease is not contagious. Satisfied with this decision, he gives himself no further trouble about it, and pays no attention to any thing that may be said or written in opposition to his own opinion.

It is a remarkable circumstance, that glanders cannot be communicated by applying the matter which is discharged from the nose of a glandered horse to the nostrils of a sound horse, even though a piece of lint soaked in the matter be put up the nostrils, and kept in contact with the pituitary membrane for a

short time; or even if the matter be thrown up the nostrils with a syringe. But, if the smallest quantity of matter be applied in the way of inoculation, either to the membrane of the nostrils, or to any part of the body, a glanderous ulcer will be produced, from which farcy buds and corded lymphatics will proceed. After a few weeks the poison will get into the circulation, and the horse will be completely glandered. The circumstance of glanders not being communicated by applying matter to the nostril, enables us to account for a horse escaping the disorder, as he sometimes does, after being put into a glandered stable, or standing by the side of a glandered horse. I believe, however, that glanders is frequently communicated by (accidental) inoculation; and that there is only one other way in which it can be communicated, that is, by swallowing the matter which flows from the nose of a glandered horse.—*Vide* BLAINE.

A horse affected with glanders may inoculate himself, and thereby produce the farcy. I have known this happen to a horse while at grass. The horse had an itching in his hind leg, which led him to rub and bite the part, and, at the same time, rub on it the glanderous matter which flowed from his nostril. The possibility of this circumstance taking place may be easily proved by inoculating a glandered horse, in any part of his body, with some of his own matter. There are many ways in which a sound horse may be accidentally inoculated with the matter of glanders, for the slightest scratch in any part of the body is sufficient. Horses that are cleaned with a curry comb are very liable to be scratched in those parts where the bones are prominent, such as the inside of the hock or knee, the shank bones and the head. To such scratches glanderous matter may be applied by the hands of the groom after he has been examining the nose of a glandered horse, or wiping off the matter from his nostrils; or by the horse himself transferring glanderous matter from the nose of a diseased horse, or from the manger, or other part where any matter has been deposited, for horses are very fond of rubbing their noses against the manger or stall, and a glandered horse will generally try to rub off the matter from his nose against the manger, the rack, the stall, or against another horse; and if a sound horse happen to stand by one that is glandered, they will often be seen nabbing or gently biting each other, or rubbing noses. In short, having proved that glanders is thus communicated, we can conceive a variety of ways in which a horse may be accidentally inoculated.

The reader may form some idea of the extent of such losses when informed that large inn-keepers have been nearly ruined by them. I had occasion to condemn eight horses at one time, in one establishment, which, added to those already lost, amounted in value to five hundred pounds. In one regiment fifty glandered horses were shot in one day. The twenty-third French dragoons, when quartered in Italy, in March, 1809, had seventy-six horses at one time affected with glanders and farcy, or suspected of being so affected.

As I have demonstrated the manner in which glanders is communicated, it is needless to say any thing of the mode of prevention, except briefly observing, that it can only be accomplished by preventing any glanderous matter from coming near a horse, or mixing with his food or water; and that the only method of purifying an infected stable, is to remove every thing on which glanderous matter may have fallen, and to wash and scrape the fixtures, such as the rack and manger, thoroughly. I have in a former edition advised a fumigation with the gas which arises from a mixture of common salt, manganese, and oil of vitriol; because I have found that glanderous matter which has been exposed to this gas is rendered quite innocent, though an ass be inoculated with it; and I have directed the stable to be first thoroughly cleansed, because if any dry hard glanderous matter should remain, the water employed in cleansing the stable will have moistened it, and thereby enable the fumigation to mix with it, and destroy its poisonous quality.—*White.*

GLARE, *v.* To shine so as to dazzle the eyes.

GLARE, *s.* Overpowering lustre, splendour, such as dazzles the eye; a fierce piercing look.

GLASS, *s.* An artificial substance made by fusing salts and flint or sand together, with a vehement fire; a glass vessel of any kind; a looking-glass; a glass to help the sight; an hour-glass, a glass used in measuring time by the flux of sand; a cup of glass used to drink in; the quantity of wine usually contained in a glass; a perspective glass.

GLASSY, *a.* Vitreous; resembling glass, as in smoothness, lustre, or brittleness.

Glead, *s.* A kind of hawk.

Glen, *s.* A valley, a dale.

Glires, *s.* The fourth order of the class Mammalia in the Linnæan system. It includes animals with two foreteeth, a cutting one in each jaw, no tusks, and claws formed for running, as the hare, rabbit, &c.

Glow-worm, *s.* A small creeping insect with a luminous tail.

Glue, *s.* A viscous cement. The best is made from the parings of hides and other offals, by boiling them well in water, then straining off all impurities, and, lastly, boiling them again.

Glue, *v.* To join with a viscous cement; to unite.

Glute, *s.* The slimy substance in a hawk's pannel.

Glyn, *s.* A hollow between two mountains.

Gnarl, *v.* To growl, to murmur, to snarl.

Gnash, *v.* To grind or collide the teeth.

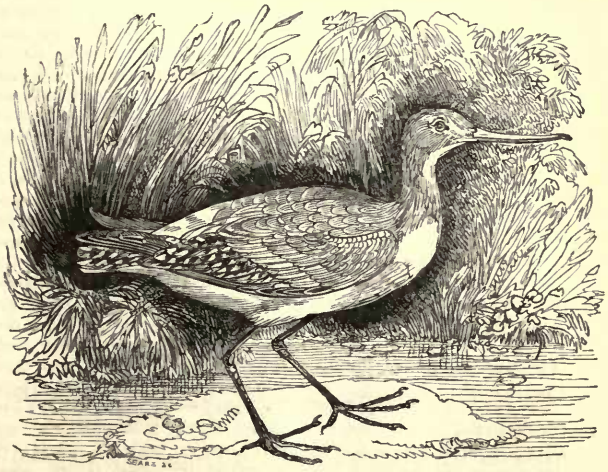
Gnat, *s.* A small winged stinging insect.

Gnaw, *v.* To exercise the teeth.

Goar, *s.* Any edging sewed upon cloth.

Goat, *s.* An animal that seems a middle species between deer and sheep.

Godwit, *s.* A bird of particular delicacy.



Buffon enumerates eight species of this division of the scolopax genus, under the name of barges, including the foreign kinds; and Latham makes out the same number of different sorts, all British. They are a timid, shy, and solitary tribe; their mode of subsistence constrains them to spend their lives amidst the fens, searching for their food in the mud and wet soil, where they remain during the day, shaded and hidden among

reeds and rushes, in that obscurity which their timidity makes them prefer. They seldom remain above a day or two in the same place, and it often happens that in the morning not one is to be found in those marshes where they were numerous the evening before. They remove in a flock in the night, and when there is moonlight, may be seen and heard passing at a vast height.

Their bills are long and slender, and, like the common snipe's, are smooth and blunt at the tip; their legs are of various colours, and long. When pursued by the sportsman, they run with great speed, are very restless, and spring at a great distaace, and make a scream as they rise. Their voice is somewhat extraordinary, and has been compared to the smothered bleating of a goat. They delight in salt marshes, and are rare in countries remote from the sea. Their flesh is delicate and excellent food.

Common Godwit, Godwyn, Yarnhelp or *Yarnhip.*—(*Scolopax ægocephala*, Linn. *La grande Barge Grise*, Buff.)

The weight of this bird is about twelve ounces; length about sixteen inches; the bill is four inches long, and bent a little upwards, black at the point, gradually softening into a pale purple towards the base; a whitish streak passes from the bill over each eye; the head, neck, back, scapulars, and coverts, are of a dingy pale brown, each feather marked down the middle with a dark spot. The fore part of the breast is streaked with black; the belly, vent, and tail, are white, the latter regularly barred with black; the webs of the first six quill feathers are black, edged on the interior sides with reddish brown; the legs are in general dark coloured, inclining to a greenish blue.

The godwit is met with in various parts of Europe, Asia, and America; in Great Britain, in the spring and summer, it resides in the fens and marshes, where it rears its young, and feeds upon small worms and insects. During these seasons it only removes from one marsh to another; but when the winter sets in with severity, it seeks the salt marshes and the seashore.

The godwit is much esteemed by epicures as a great delicacy, and sells very high. It is caught in nets, to which it is allured by a stale or stuffed bird, in the same manner, and in the same season, as the ruffs and reeves.—*Bewick.*

Gold, *s.* The purest, heaviest, and most precious of all metals; money.

To dye fine bright Gold Colours.—First dye a very bright yellow with turmeric, lift out your stuff, and add a teaspoonful of madder; return it, and boil it about three minutes, and draw a part for the first shade; then put in a tablespoonful of turmeric, boil it up smartly; lift out your stuff and add better than a teaspoonful of madder; put it into the pot again, and boil it about seven minutes, and draw the second shade. For the third do the same, only adding some turmeric as before, and two teaspoonfuls of madder; or, if you see there is not a proper difference between the shades, add more madder, boil the wool in this ten minutes, and draw for the third shade. Add more turmeric, and three or four more teaspoonfuls of madder, or more, till you bring it near to a blood orange.

The lightest of these shades mixes the olive camel, the second the light rail, the third the dark rail and brown coughlan, and the fourth mixes the golden sooty. This is the best way to dye gold colours. Any man who is not a regular dyer can only be called a fancy dyer, and therefore can give no regular rules. If you are a judge of these colours, you will know by your eye when you get the proper shade. If the first two of them should not be enough of the gold, add more madder by pinches, lest you should overpower it. Divide each shade of the colours into two parts, for fine olives, bordering on muscle's-beard. Put down a clean vessel with clean water, and put your lightest shade into it, first boiling in it about the size of a horse-bean of copperas. Throw in your stuff, be smart in passing it under your liquor, and in an instant you have a fine golden olive. Put in the size of a pea more of copperas, and put your next shade, and so on till all is done. You are to put in as much as two peas in the last. A little of the dark shade helps the March olive camel, and I have mixed out of these, with a little brown sable, a very good olive camel. All turmeric dyes, when put with binding stuff, stand well. Be careful your turmeric and madder be sound, if not, all is lost. Sound turmeric is very bright, and of a sweet smell. Sound madder is of an oily feel and a sweet smell, and is bright in colour; that which resembles brick-dust is bad, and gives no colour. The madder that is the best may be discovered easily by the taste.—*Ancient Recipe.*

Golden, *a.* Made of gold, consisting of gold; shining; yellow, of the colour of gold; valuable.

Golden Eagle. *Vide* Eagle.

The golden eagle is said to be not unfrequent in the mountainous parts of Ireland and Scotland. It breeds in the most inaccessible rocks, and lays three or four white eggs, Selby says two, of a greyish white colour, clouded with spots of reddish brown.

Smith, in the History of Kerry, says, a poor man in that county got a comfortable subsistence for his family, during a summer of famine, out of an eagle's nest.

Pennant informs us it is frequent in Scotland, and adds, that it is very destructive to deer, which it will seize between the horns, and, by incessantly beating it with its wings, soon makes a prey of the harassed animal; that it builds in cliffs of rocks near the deer forests, and makes great havoc not only amongst them, but also the white hares and ptarmigans.

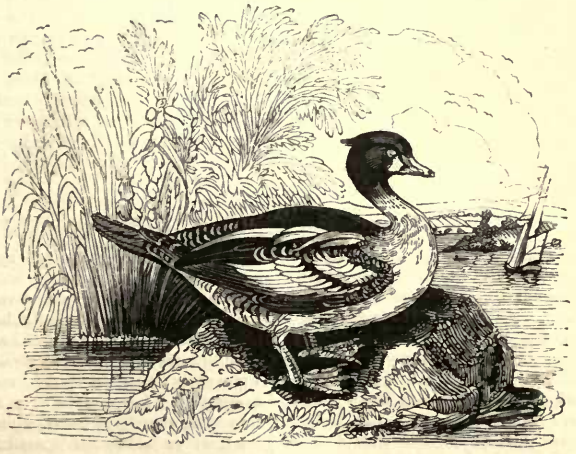
Willoughby gives a curious account of the nest of this species found in the woodlands, near the river Derwent, in the Peak of Derbyshire. He says it was made of large sticks, lined with two layers of rushes, between which was one of heath; that in it was one young and an addle egg, and by them a lamb, a hare, and three heath-poults.

Instances have been recorded of infants being carried to their nests; and in the Orkneys there is a law which entitles any person killing one of these birds, to a hen out of every house in the parish in which it is killed. They are remarkable for their longevity, and abstinence from food. Pennant mentions one enduring hunger for twenty-one days.

As we were sporting in the neighbourhood of Ben-Lomond, on the summit of the lesser mountains that form its base, a grouse, (Tetrao Scoticus), was wounded, and flew with difficulty eighty or a hundred paces. An eagle, apparently of this species, perceiving the laborious flight of the grouse, descended with rapid wing from the adjacent lofty cliffs, before our guns were re-loaded, and, in defiance of the shouts made to deter him, carried off his prey.

In another part of the Western Highlands of Scotland, we had an opportunity of witnessing the power of the flight of this bird in pursuit of its quarry. An old black-cock (Tetrao tetrix) was sprung, and was instantly pursued by the eagle, (who must have been on a neighbouring rock unperceived,) across the glen, the breadth of which was at least two miles. The eagle made several unsuccessful pounces, but as there was no cover and the bird large, it probably fell a victim in the end. —*Smith—Pennant—Montagu.*

Golden-eye (*Anas clangula*, Linn.; *Le Garrot*, Buff.) *s.*



The weight of this species varies from twenty-six ounces to two pounds. The length is nineteen inches, and the breadth thirty-one. The bill is bluish-black, short, thick, and elevated at the base; the head large, slightly crested, and black, or rather of a glossy bottle-green, with violet reflections; a large white spot is placed on the space on each side be-

tween the corners of the mouth and the eyes, the irides of which are of a golden-yellow; the throat, and a small portion of the upper part of the neck, are of a sooty or velvet-black; the lower, to the shoulders, the breast, belly, and vent, white; but some of the side-feathers, and those which cover the thighs, are tipped with black; the scapulars white and deep black; of the latter colour are also the adjoining long tertial feathers, and those on the greater part of the back; the first fourteen primary quills, with all the outside edge of the wing, including the ridge and a portion of the coverts, are brownish black; the middle part of the wing is white, crossed by a narrow black stripe, which is formed by the tips of the lesser coverts; tail dark, hoary brown; legs short, of a reddish yellow colour, with the webs dusky; the inner and hinder toes are furnished with lateral webs; on the latter these webs are large and flapped. Willoughby says, "the windpipe hath a labyrinth at the divarication, and besides, above swells out into a belly or puff-like cavity."

These birds do not congregate in large flocks, nor are they numerous on the British shores, or on the lakes in the interior. They are late in taking their departure northward in the spring, the specimens before mentioned being shot in April. In their flight they make they air whistle with the vigorous quick strokes of their wings; they are excellent divers, and seldom set foot on the shore, upon which, it is said, they walk with great apparent difficulty, and, except in the breeding season, only repair to it for the purpose of taking their repose.

The attempts which were made by M. Baillon to domesticate these birds, he informs the Count de Buffon, quite failed of success.

* * *

An extraordinary occurrence took place, March, 1810, near Drumburgh, a fisherman, placed a flounder-net in the river Eden, which is subject to the flux and reflux of the tide, and on his returning to take up his net, instead of finding fish, he found it loaded with wild ducks; during his absence, a fleet of these birds had alighted below the net, and on the flowing of the tide, were carried, from the contraction of the channel, with great impetuosity into the net, and were drowned. He caught one hundred and seventy golden-eyed wild ducks, supposed to be from the Orkneys, as very rarely any of that species frequent that part of the country.—*Bewick.*

GOLDEN ORIOLE (*Oriolus galbula*, LINN.), *s.*

This is the only species ever found in England, a few instances of which only are on record. It is about the size of a blackbird: length nine inches and a half. The bill is brownish red; irides red. General colour of the plumage fine golden yellow; between the bill and eye a streak of black; the wings black, marked here and there with yellow, and a patch of the same in the middle of the wing; the two middle feathers of the tail are black, inclining to olive at the base, the very tips yellow; the base half of the others black, the rest yellow; legs lead-colour; claws black.

The female is of a dull grecnish brown in those parts where the male is black. Wings dusky; tail dirty green; all but the two middle feathers yellowish white at the ends.

This beautiful bird is not uncommon in France, where it breeds. The nest is curiously constructed, in shape like a purse: it is fastened to the extreme forked branches of tall trees, composed of fibres of hemp, or straw mixed with fine dry stalks of grass, and lined with moss and liverwort. She is said to be so tenacious of her eggs as to suffer herself to be taken on the nest.—*Montagu.*

GOLDFINCH, (*Carduelis communis*, CUVIER,) *s.* A singing bird.

This beautiful bird is rather less than the chaffinch. The bill is white, with a black point; irides dusky; the forehead and chin rich scarlet; top of the head black; cheeks white, bounded with black; hind part of the head white; breast pale tawny brown; the coverts of the wings black; quill feathers dusky black, barred across with bright yellow; tips white; belly white; the tail feathers black; most of them marked with a white spot near their ends; legs whitish.

The female differs very little in plumage from the male: in general, the smaller coverts of the wings are not so black. Young birds are brown about the head for some time after they leave the nest, and are by some called grey-pates.

The goldfinch is subject to variety in confinement; sometimes wholly black; others black and white, or quite white. A variety is sometimes taken by the birdcatchers with white spots under the throat: such is termed a cheverel. It makes a very elegant nest, formed externally of bents, moss, and liverwort, woven together with wool; lined sometimes with wool or hair, covered with thistle down, or willow cotton.

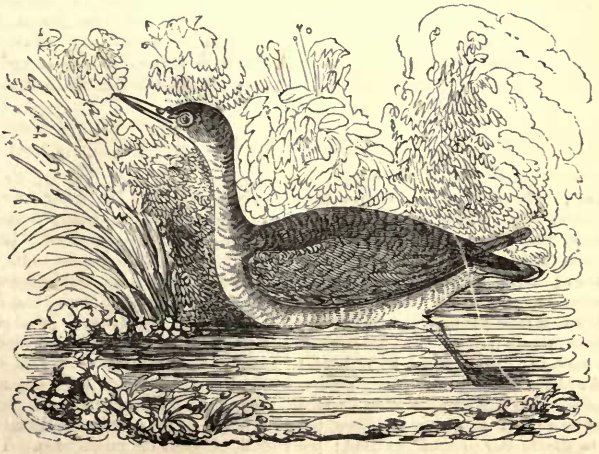
These birds will in general take the materials for building, which they can most easily procure. On the tenth of May I observed a

pair of goldfinches beginning to make their nest in my garden; they had formed the ground-work with moss, grass, &c., as usual, but on my scattering small parcels of wool in different parts of the garden, they, in a great measure, left off the use of their own stuff, and employed the wool. Afterwards, I gave them cotton, on which they rejected the wool and proceeded with the cotton; the third day I supplied them with fine down, on which they forsook both the other and finished their work with this last article. The nest, when completed, was somewhat larger than is usually made by this bird, but retained the pretty roundness of figure and neatness of workmanship, which is proper to the goldfinch. The nest was completed in the space of three days, and remained unoccupied for the space of four days; the first egg not being laid till the seventh day from beginning the work. The eggs are four or five in number, of a bluish white, with a few spots, chiefly at the larger end.

The goldfinch is easily tamed and easily taught, and its capability of learning the notes of other birds is well known; but the tricks it may be taught to perform are truly astonishing. A few years ago the Sieur Roman exhibited his birds, which were goldfinches, linnets, and canaries. One appeared dead, and was held up by the tail or claw without exhibiting any signs of life; a second stood on its head with its claws in the air; a third imitated a Dutch milkmaid going to market, with pails on its shoulders; a fourth mimicked a Venetian girl looking out at a window; a fifth appeared as a soldier, and mounted guard as a sentinel; and the sixth acted as a cannoneer with a cap on its head, a firelock on its shoulder, and a match in its claw, and discharged a small cannon. The same bird also acted as if it had been wounded. It was wheeled in a barrow, to convey it, as it were, to the hospital; after which, it flew away before the company: the seventh turned a kind of windmill: and the last bird stood in the midst of some fireworks which were discharged all round it, and this without exhibiting the least symptom of fear.

They may also be taught to draw up little buckets or cups with food and water. To teach them this, there must be put round them a narrow soft leather belt, in which there must be four holes—two for the wings, and two for the feet. The belt is joined a little below the breast, where there is a ring, to which the chain is attached, that supports the little bucket or cup. We have seen both the goldfinch and lesser redpole perform this action, but in a different manner. Their cage had no wires,—only a back-board, a bottom-board, and one perch. To one foot of the bird was attached a light slender chain, which allowed it more exercise than it could have had in the common wire cage; at the outer edge of the bottom-board was a ring, through which ran the chain, to each end of which were fastened the little buckets that held the food and water, which the bird drew up with its foot and bill; and as one bucket was drawn up, the other sunk, thus lessening the difficulty, and lightening the task.—*Montagu—Bolton—Syme.*

GOOSANDER (*Mergus merganser*, LINN.), *s.* a species of diver.

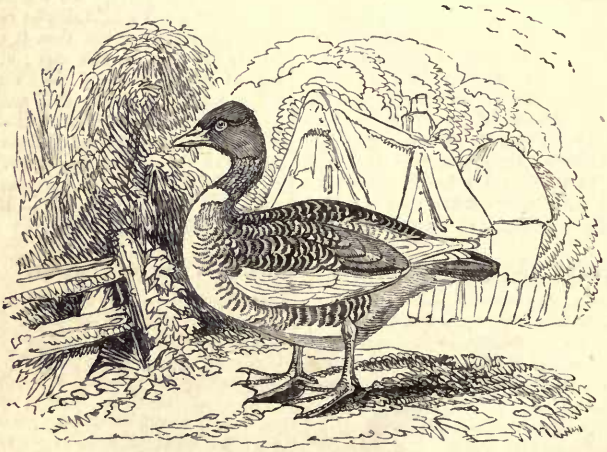


This is the largest species of merganser; weight about four pounds; length two feet

four inches. The bill three inches long, narrow, serrated, or toothed, on the edges of both mandibles; the tip of the upper hooked; colour red: irides the same; the head and upper part of the neck glossy greenish black; the feathers on the crown and back of the head are long and loose; the rest of the neck, breast, and under parts, white; the sides, above the thighs, undulated with dusky lines; the upper part of the back black; lower part of the back, rump, and tail coverts, brownish ash-colour; the lesser wing coverts white; the rest ash-colour, with some white; the greater quill feathers are black, with ash-colour on the interior webs of some of the inner ones; the secondaries white, margined with greenish black on the outer webs; the scapulars nearest the body black, the others white; the tail consists of eighteen ash-coloured feathers, with dusky shafts; legs orange; in some specimens the breast is of a rosy buff-colour.

The goosander sometimes visits our rivers and lakes in severe winters, but retires to the more northern latitudes of Greenland and Iceland, where it breeds. In the Orkneys and Hebrides it is found the whole year round, while in the other districts it is only a winter visitant. It is not uncommon on the continent of Europe and Asia, but most plentiful towards the north. It is a winter inhabitant of the sea shore, and fresh water lakes of America, where they usually associate in small parties of six and eight. They disappear from that country in the month of April, and return in November. Its food consists entirely of fish, for which it dives with great celerity, and holds its slippery prey with great security, by means of its toothed bill, which is admirably adapted to the purpose.—*Montagu.*

GOOSE, *s.* A large waterfowl. *Vide* ANSER.



Canada Goose, (*Anas Canadensis* LINN.; *L'Oie à cravate*, BUFF.)—This is less than the swan goose, but taller and longer than the common goose, and may be considered as the connecting link between that species and the swan. Their average weight is about nine pounds, and the length about three feet six inches. The bill is black and two inches and a half long: irides hazel: the head and neck are also black, with a crescent shaped white band on the throat, which tapers off to a point on each side below the cheeks, to the hinder part of the head: the whiteness of this cravat is heightened by its contrast with the dark surrounding plumage, and it looks very pretty: this mark also distinguishes it from others of the goose tribe. All the upper parts of the plumage, the breast, and a portion of the belly, are of a dull brown, sometimes mixed with grey: the lower part of the neck, the belly, vent, and upper tail coverts, white; quills and tail black; legs dingy blue.

The English of Hudson's Bay depend greatly on geese, of these and other kinds, for their support; and, in favourable years, kill three or four thousand, which they salt and barrel. Their arrival is impatiently attended; it is the harbinger of the spring, and the month named by the Indians the goose-moon. They appear usually at our settlements in numbers, about St. George's day, O. S. and fly northward to nestle in security. They prefer islands to the

continent, as further from the haunts of men. Thus Marble Island was found, in August, to swarm with swans, geese, and ducks; the old ones moulting, and the young at that time incapable of flying.

The English send out their servants, as well as Indians, to shoot these birds on their passage. It is in vain to pursue them; they therefore form a row of huts made of boughs, at musket shot distance from each other, and place them in a line across the vast marshes of the country. Each hovel, or, as it is called, stand, is occupied by only a single person. These attend the flight of the birds, and, on their approach, mimic their cackle so well that the geese will answer, and wheel and come nearer the stand. The sportsman keeps motionless, and on his knees, with his gun cocked, the whole time; and nevers fires till he has seen the eyes of the geese. He fires as they are going from him, then picks up another gun that lies by him, and discharges that. The geese which he has killed he sets upon sticks as if alive, to decoy others; he also makes artificial birds for the same purpose. In a good day (for they fly in very uncertain and unequal numbers) a single Indian will kill two hundred. Notwithstanding every species of goose has a different call, yet the Indians are admirable in their imitation of every one.

The vernal flight of the geese lasts from the middle of April until the middle of May. Their first appearance coincides with the thawing of the swamps, when they are very lean. The autumnal, or the season of their return with their young, is from the middle of August to the middle of October. Those which are taken in this latter season, when the frosts usually begin, are preserved in their feathers and left to be frozen for the fresh provisions of the winter stock. The feathers constitute an article of commerce, and are sent into England.

Common Wild Goose—Grey Lag Goose, (*Anas anser*, LINN.; *L'Oie Sauvage*, BUFF.) This wild goose generally weighs about ten pounds, and measures two feet nine inches in length, and five in breadth. The bill is thick at the base, tapers towards the tip, and is of a yellowish red colour, with the nail white: the head and neck are of a cinereous brown, tinged with dull yellow, and from the separations of the feathers, the latter appears striped downwards: the upper part of the plumage is of a deep brown, mixed with ash-grey; each feather is lighter on the edges, and the lesser coverts are tipped with white: the shafts of the primary quills are white, the webs grey, and the tips black: the secondaries black, edged with white: the breast and belly are crossed and clouded with dusky and ash on a whitish ground; and the tail coverts and vent are of a snowy whiteness: the middle feathers of the tail are dusky, tipped with white: those adjoining more deeply tipped, and the exterior ones nearly all white: legs pale red.

This species is common in this country, and although large flocks of them, well known to the curious, in all the various shapes which they assume in their flight, are seen regularly migrating southward in the autumn, and northward in the spring, yet several of them are known to remain and breed in the fens of Lincolnshire and Cambridgeshire, and, it is said, in various other parts of Great Britain. Pennant says they reside in the fens the whole year, breed there, and hatch about eight or nine young ones, which are often taken, easily made tame, and much more esteemed for the excellent flavour of their flesh than the domestic goose.

Egyptian Goose.—(*Anas Ægyptiaca*, LINN.; *L'Oie d' Egypte*, BUFF.)—This beautifully variegated species is nearly the size of the grey lag, or the common wild goose. The bill red, about two inches in length, tip black, and nostrils dusky; eyelids red, and the irides pale yellow; the throat, cheeks, and upper part of the head, are white; a rusty chestnut-coloured patch, on each side of the head, surrounds the eyes. About two-thirds of the neck, from the head downwards, is of a pale reddish bay colour, darker at the lower end; a broad deep chestnut-coloured spot covers the middle of the breast; the shoulders and scapulars are of a reddish brown, prettily crossed with numerous dark waved lines; the wing coverts are white; the greater ones barred near the tips with black; the secondary quills are tinged with reddish bay, and bordered with chestnut; those of the primaries, which join them, are edged with glossy green, and the rest of the first quills are black; the lower part of the back, the rump, and tail, are black; the belly is white, but all the other fore-parts and sides of the body, from the neck near the vent, are delicately pencilled with narrow rust-coloured zigzag lines on a pale ash-grey ground; each wing is furnished on the bend with a short blunt spur. The colours of the female are pretty much the same as those of the male, but not by any means so bright or distinctly marked. This kind is common in a wild state in Egypt, at the Cape of Good Hope, and in various parts of the intermediate territories of Africa, whence they have been brought into, and domesticated in this and other civilised countries, and are now an admired ornament on many pieces of water contiguous to gentlemen's seats.

Red-breasted Goose.—(*Siberian Goose; Anser ruficollis.*)—The red-breasted goose measures above twenty inches in length, and its extended wings three feet ten in breadth. The bill is short, of a brown colour, with the nail black; irides yellowish hazel; the cheeks and brow are dusky, speckled with white; an

oval white spot occupies the space between the bill and the eyes, and is bounded above, on each side of the head, by a black line which falls down the hinder part of the neck; the chin, throat, crown of the head, and hinder part of the neck to the back, are black; two stripes of white fall down from behind each eye on the sides of the neck, and meet in the middle; the other parts of the neck, and the upper part of the breast, are of a deep rusty red, and the latter is terminated by two narrow bands of white and black; the back and wings are dusky; the greater coverts edged with grey; sides and lower part of the breast black; belly, upper and under tail coverts, white; legs dusky.

This beautiful species is a native of Russia and Siberia, whence they migrate southward in the autumn, and return in the spring; they are said to frequent the Caspian Sea, and are supposed to winter in Persia. They are very rare in this country.

White-fronted Wild Goose.—(*Laughing Goose; Anas albifrons; L' Oie rieuse*, BUFF.)—This species measures two feet four inches in length, and four feet six in the extended wings, and weighs about five pounds. The bill is thick at the base, of a yellowish red colour; the nail white; from the base of the bill and corners of the mouth a white patch is extended over the forehead; the rest of the head, neck, and upper parts of the plumage, are dark brown; the primary and secondary quills are of the same colour, but much darker, and the wing coverts are tinged with ash; the breast and belly are dirty white, spotted with dusky; the tail is of a hoary ash-coloured brown, and surrounded, like the lag goose's, with a white ring at the base; the legs yellow.

These birds form a part of those vast tribes which swarm about Hudson's Bay, and the north of Europe and Asia, during the summer months, and are but thinly scattered over the other quarters of the world. They visit the fens and marshy places in England in small flocks in the winter months, and disappear about the beginning of March. It is said that they never feed in the corn fields, but confine themselves wholly to such wilds and swamps as are constantly covered with water.

* * *

Wild geese are very destructive to the growing corn in the fields where they happen to halt in their migratory excursion. In some countries they are caught at those seasons in long nets, resembling those used for catching larks: to these nets the wild geese are decoyed by tame ones, placed there for that purpose. Many other schemes are contrived to take these wary birds; but, as they feed only in the day time, and betake themselves to the water at night, the fowler must exert his utmost care and ingenuity in order to accomplish his ends: all must be planned in the dark, and every trace of suspicion removed, for nothing can exceed the vigilant circumspection and acute ear of the sentinel, who, placed on some eminence, with outstretched neck, surveys every thing that moves within the circle of the centre on which he takes his stand; and the instant he sounds the alarm, the whole flock betake themselves to flight.

The time that wild geese feed in this country is by night, and particularly during moonlight. I have never known them either netted or decoyed; and all the shooter has to rely upon is patience and a long barrel.

* * *

M. Cuvier has published a brief description of a bird produced between a swan and a goose, which in fact amounts to its being a perfect goose, in every thing but size like its mother, which it greatly exceeds.—*Bewick—Wild Sports.*

GORGE, *s.* The throat, the swallow; that which is gorged or swallowed; the craw or crop.

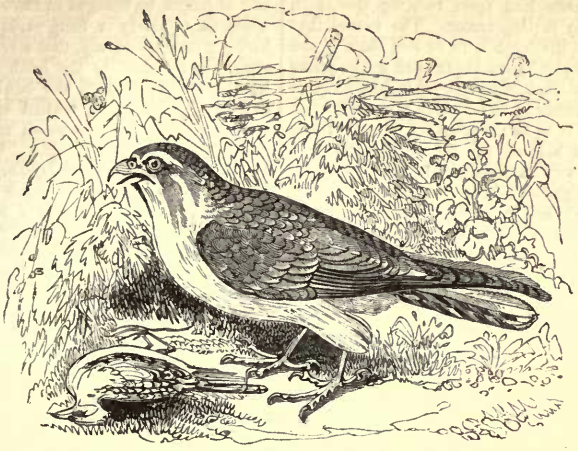
GORGE, *v.* To fill up to the throat, to glut, to satiate; to swallow, as the fish has gorged the hook.

GORSE, *s.* Furze, a thick prickly shrub.

Furze-covers cannot be too much encouraged, for there cubs are safe. They have also other advantages attending them: they are certain places to find in; foxes cannot break from them unseen, nor are you so liable to change as in other covers.

A fox, when pressed by hounds, will seldom go into a *furze-brake.* Rabbits, which are the fox's favourite food, may also be encouraged *there*, and yet do little damage. Were they suffered to establish themselves in your woods, it would be difficult to destroy them afterwards. Thus far I object to them as a farmer: I object to them also as a fox-hunter; since nothing is more prejudicial to the breeding of foxes than disturbing your woods late in the season, to destroy the rabbits.—*Beckford.*

GOSHAWK, *s.* A hawk of a large kind.



This is a large species, superior in size to the buzzard; length twenty-two inches or more; the bill is blue, tip black; cere yellowish green; irides yellow.

The head, hind part of the neck, back, and wings, deep brown; over the eye is a white line, and a broken patch of the same colour on the side of the neck; the breast and belly marked with numerous transverse bars of black and white; the tail is long, and ash-coloured, with four or five dusky bars; legs yellow; claws black.

The goshawk is rarely found in England, but is not uncommon in the wild and mountainous parts of Scotland, where it is known to breed in the forest of Rothemurchus, and on the woody banks of the Dee. They are said to be numerous in the Orkney Islands, where they breed in the rocks and sea cliffs. They more generally build however in lofty fir trees, and lay from two to four eggs, of a bluish white, marked with streaks and spots of reddish brown. Its flight is described to be very rapid, generally low, and it strikes its prey on the wing, near the ground, being incapable of mounting. If its prey take refuge, it will wait patiently on a tree, or a stone, until the game, pressed by hunger, is induced to move; and as this hawk is capable of great abstinence, it generally succeeds in taking it. Colonel Thornton informs us, that he flew one at a pheasant, which got into cover, and the hawk was lost; at ten o'clock next morning the falconer found her, and just as he caught her the pheasant ran and rose. According to Meyer, it will prey on its own young, but its principal food is wild ducks, hares, and rabbits. In the young, the head, neck, and belly, are of a rufous colour, with long brown spots, and tips of the tail white. In this plumage they have been termed gentil falcons. In the days of falconry, they were held in high repute for hunting cranes, geese, and the larger sorts of game, and were considered by falconers, the best and most courageous of the short-winged hawks.

The goshawk is common in France, Germany, and Russia; it is also found in America, but is rare in Holland.

* * *

The goshawk is taken by a net about eight feet deep, and of sufficient length to inclose a square of nine or ten feet. It is suspended to upright stakes, by notches cut upwards, so that it may be disengaged from them, when the hawk strikes against it. This inclosure is left open at the top, and in the middle a pigeon is to be tied to the ground for a bait. The meshes of this net should not be too small, and the colour should be as much as possible like that of the surrounding objects.

The goshawk is termed a hawk of the fist, because it is from thence, and not from the air, that he flies at his game. He is never to be hooded unless for a short time when first taken, or to keep him quiet in travelling. The resting-place of short-winged hawks is called a perch. It is a pole of about an inch and a half in diameter, fixed horizontally about four feet from the ground. It is to be placed under a tree in fine weather, and in some sheltered place when it rains. To the perch

is suspended a piece of cloth, or of matting, hanging like a curtain, which assists the hawk in regaining the perch when he has *baited* off, and prevents him from twisting the leash round it by passing under. The swivel that is fixed to the leash is to be tied close to the top of the perch, and is attached to the jesses by a short leash, six or eight inches long, in such a manner as to be easily taken off when the hawk is to be prepared for flying. He is then to be held on the fist by the jesses, in the same way as the slight falcon.

As the goshawk is carried without a hood, and as he is not to be brought down by the lure, but must come to the fist at the falconer's call, it is essential that he should be made as tame as possible, and this can only be done by almost constant *carriage*, and by allowing him frequently to *pull upon* a stump or pinion, from which he can get but little meat. He will soon learn to come from the perch to the fist, if held close to him when allured by meat. By persevering in this practice, and by cautiously increasing the distance, he will at length be brought to come to the fist, when he is thirty or forty yards off. It is hardly necessary to say, that a creance must always be attached to the leash when these lessons are given, until the hawk is sufficiently reclaimed to be trusted at large, and with this precaution too much must not be required of him at a time. In breaking hawks, and all other animals, much additional trouble is occasioned, and much time is lost in endeavouring to get them on too fast. When the goshawk will come freely to the fist, not only from the perch, but from the ground, and from low trees (on which he should frequently be placed), it will only be necessary to give him a few live partridges in the way that I have described, and he will be ready for the field.—*Montagu—Sebright.*

GOSLING, *s.* A young goose, a goose not yet full-grown.

GOURDINESS, *s.* A swelling in a horse's leg.

GOURNET, *s.* A sea-fish, commonly pronounced *Gurnet.* Of this fish the red is excellent, while the grey sort is coarse and insipid.

GRAIN, *s.* A single seed of corn; corn; the seed of any fruit; any minute particle; the smallest weight; anything proverbially small; the direction of the fibres of wood, or other fibrous matter.

GRAINED, *a.* Rough, made less smooth.

GRAINS, *s.* The husks of malt exhausted in brewing; the prongs of a fish-spear.

GRALLA, *s.* That order of birds which Linnæus classifies as having obtuse bills, and long legs, as the crane, stork, &c.

GRAMINIVOROUS, *a.* Grass-eating.

GRANIVOROUS, *a.* Eating grain.

Granivorous birds.—Birds may be distinguished, like quadrupeds, into two kinds or classes—granivorous and carnivorous; like quadrupeds, too, there are some that hold a middle nature, and partake of both. Granivorous birds are furnished with larger intestines, and proportionally longer, than those of the carnivorous kind. Their food, which consists of grain of various sorts, is conveyed whole and entire into the first stomach or craw, where it undergoes a partial dilution by a liquor, secreted from the glands, and spread over its surface; it is then received into another species of stomach, where it is further diluted; after which it is transmitted into the gizzard, or true stomach, consisting of two very strong muscles, covered externally with a tendinous substance, and lined with a thick membrane of prodigious power and strength; in this place the food is completely triturated, and rendered fit for the operation of the gastric juices. The extraordinary powers of the gizzard in comminuting the food, so as to prepare it for digestion, would exceed all credibility, were they not supported by incontrovertible facts, founded upon experiments.

In order to ascertain the strength of these stomachs, the ingenious Spallanzani made the following curious and very interesting experiments:—

Tin tubes, full of grain, were forced into the stomachs of turkeys, and after remaining twenty hours, were found to be broken, compressed, and distorted in the most irregular manner.

In proceeding further, the same author relates, that the stomach of a cock, in the space of twenty-four hours, broke off the angles of a piece of rough jagged glass, and upon examin-

ing the gizzard, no wound or laceration appeared.

Twelve strong needles were firmly fixed in a ball of lead, the points of which projected about a quarter of an inch from the surface; thus armed, it was covered with a case of paper, and forced down the throat of a turkey; the bird retained it a day and a half, without showing the least symptom of uneasiness; the points of all the needles were broken off close to the surface of the ball, except two or three, of which the stumps projected a little. The same author relates another experiment, seemingly still more cruel; he fixed twelve small lancets, very sharp, in a similar ball of lead, which was given in the same manner to a turkey cock, and left eight hours in the stomach; at the expiration of which the organ was opened but nothing appeared except the naked ball, the twelve lancets having been broken to pieces, the stomach remaining perfectly sound and entire. From these curious and well-attested facts we may conclude, that the stones so often found in the stomachs of many of the feathered tribes, are highly useful in comminuting grain and other hard substances which constitute their food.

Granivorous birds partake much of the nature and disposition of herbivorous quadrupeds. In both the number of their stomachs, the length and capacity of their intestines, and the quality of their food, they are very similar; they are likewise both distinguished by the gentleness of their tempers and manners. Contented with the seeds of plants, with fruits, insects, and worms, their chief attention is directed to procuring food, hatching and rearing their offspring, and avoiding the snares of men, and the attacks of birds of prey, and other rapacious animals. They are a mild and gentle race, and are in general so tractable as easily to be domesticated.—*Bewick.*

Granulate, *v.* To grain; to break into small masses.

Grape, *s.* The fruit of the vine, growing in clusters.

Grasp, *v.* To hold in the hand, to gripe; to seize, to catch at.

Grasp, *s.* The gripe or seizure of the hand; hold; power of seizing.

Grass, *s.* The common herbage of fields on which cattle feed.

Grassy, *a.* Covered with grass.

Grate, *s.* A partition made with bars placed near to one another, to prevent fish escaping from a pond; the range of bars within which fires are made.

Grave, *v.* To carve on any hard substance; to impress deeply.

Gravitating Stops.

Gravitating Stops.—An insurance from accidents, with a double gun, is completely effected by Mr. Joseph Manton's gravitating stops, which act of themselves, to remedy the serious danger of loading with a barrel cocked; and, with these stops, you may, by holding the gun downwards, carry both barrels cocked, through a hedge-row, with little or no danger, if any circumstance could justify such determined preparation.

The gravitating stops, I should not omit to mention, require to be kept very clean, as, with rust or dirt under them, they will not fall so readily, and thereby prevent the gun from going off. This I name as a caution to a slovenly shooter, and not as an imperfection iu the plan.—*Hawker.*

Gray, *s.* White, with a mixture of black; white or hoary with old age; dark, like the opening or close of day.

Grey horses are of different shades, from the lightest silver to a dark iron grey. The silver grey reminds the observer of the palfrey, improved by an admixture of Arab blood. He does not often exceed fourteen hands and a half high, and is round carcassed —light legged—with oblique pasterns, calculated for a light carriage, or for a lady's riding —seldom subject to disease—but not very fleet, or capable of hard work.

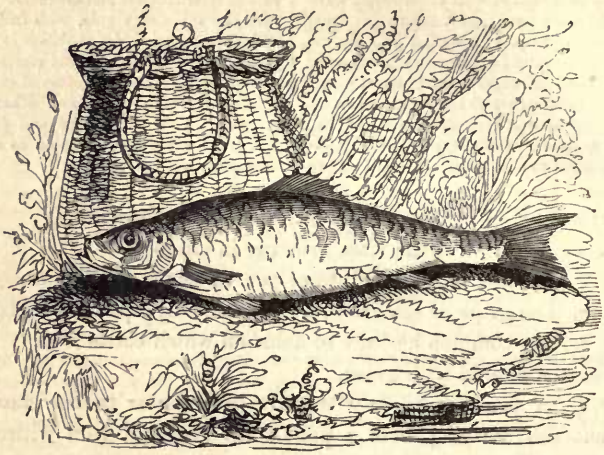
The iron grey is usually a larger horse; higher in the withers, deeper and thinner in the carcass, more angular in all his proportions, and in many cases a little too long in the legs. Some of these greys make good hackneys and hunters, and especially the Irish horses; but they are principally used for the carriage. They have more endurance than the flatness of the chest would promise; but their principal defect is their feet, which are

liable to contraction, and yet that contraction is not so often accompanied by lameness as in many other horses.

The dappled grey is generally a handsomer and a better horse: all the angular points of the iron grey are filled up, and with that which not only adds to symmetry, but to use. Whether as a hackney, or, the larger variety, a carriage-horse, there are few better, especially since his form has been so materially improved, and so much of his heaviness got rid of by the free use of foreign blood. There are not, however, so many dappled greys as there used to be, since the bays have been bred with so much care. The dappled grey, if dark at first, generally retains his colour to old age.

Some of the greys approach to a nutmeg, or even bay colour. Many of these are handsome, and most of them are hardy.

GRAYLING, *s.* The umber, a fish.



Grayling are never found in streams that run from glaciers—at least near their source; and they are killed by cold or heat. I once put some grayling from the Teme, in September, with some trout, into a confined water, rising from a spring in the yard at Dawnton; the grayling all died, but the trout lived. And in the hot summer of 1825, great numbers of large grayling died in the Avon, below Ringwood, without doubt killed by the heat in July.

The grayling lies deeper and is not so shy a fish as the trout; and, provided your link is fine, is not apt to be scared by the cast of flies on the water. The fineness of the link, and of the gut to which your flies are attached, is a most essential point, and the clearer the stream the finer should be the tackle. I have known good fishermen foiled by using a gut of ordinary thickness, though their flies were of the right size and colour. Very slender transparent gut of the colour of the water, is one of the most important causes of success in grayling fishing.

He is to be fished for at all times, for he is rarely so much out of season as to be a bad fish; and when there are flies on the water, he will generally take them: but as the trout may be considered as a spring and summer fish, so the grayling may be considered as a winter and autumnal fish.

Grayling do not refuse large flies; and in the Avon and Test May flies, and even moths, are greedily taken in the summer by large grayling. Flies, likewise, that do not inhabit the water, but are blown from the land, are good baits for grayling. There is no method more killing for large grayling, than applying a grasshopper to the point of a leaded hook, the lead and shank of which are covered with green and yellow silk, to imitate the body of the animal. This mode of fishing is called sinking and drawing. I have seen it practised in this river with as much success as maggot fishing, and the fish taken were all of the largest size; the method being most successful in deep holes, where the bottom was not visible, which are the natural haunts of such fish. In the winter, grayling rise for an hour or two in bright and tolerably warm weather, and at this time the smallest imitations of black or pale gnats that can be made, on the smallest sized hook, succeed best in taking them. In March, the dark-bodied willow fly may be

regarded as the earliest fly; the imitation of which is made by a dark claret dubbing and a dun hackle, or four small starlings' wing feathers. The blue dun comes on in the middle of the day in this month, and is imitated by dun hackles for wings and legs, and an olive dubbing for body. In mild weather, in morning and evening in this month, and through April, the green tail, or grannon, comes on in great quantities, and is well imitated by a hen pheasant's wing feather, a grey or red hackle for legs, and a dark peacock's harle, or dark hare's ear fur, for the body. The same kind of fly, of a larger size, with paler wings, kills well in the evening, through May or June. The imitation of a water insect called the spider-fly, with a lead-coloured body and woodcock's wings, is said to be a killing bait on this and other rivers, in the end of April and beginning of May, but I never happened to see it on the water. The darker alder fly, in May and June, is taken greedily by the fish; it is imitated by a dark shaded pheasant's wing, black hackle for legs, and a peacock's harle, ribbed with red silk, for the body. At this season, and in July, imitations of the black and red palmer worms, which I believe are taken for black or brown, or red beetles or cockchafers, kill well; and in dark weather there are usually very light duns on the water. In August, imitations of the house fly and blue bottle, and the red and black ant fly, are taken, and are particularly killing after floods in autumn, when great quantities of the fly are destroyed and washed down the river. In this month, in cloudy days, pale blue duns often appear, and they are still more common in September. Throughout the summer and autumn, in fine calm evenings, a large dun fly, with a pale yellow body, is greedily taken by grayling after sunset, and the imitation of it is very killing. In the end of October, and through November, there is no fly fishing but in the middle of the day, when imitations of the smaller duns may be used with great success; and I have often seen the fish sport most, and fly fishing pursued with great success in bright sunshine, from twelve till half past two o' clock, after severe frosts in the morning; and I once caught under these circumstances a very fine dish of fish on the 7th of November. It was in the year 1816; the summer and autumn had been peculiarly cold and wet, and, probably in consequence of this, the flies were in smaller quantity at their usual season, and there were a greater proportion later in the year.

Grayling, if you take your station by the side of a river, will rise nearer to you than trout, for they lie deeper, and therefore are not so much scared by an object on the bank; but they are more delicate in the choice of their flies than trout, and will much oftener rise and refuse the fly. Trout, from lying nearer the surface, are generally taken before grayling where the water is slightly coloured, or after a flood; and in rain trout usually rise better than grayling, though it sometimes happens, when great quantities of flies come out in rain, grayling, as well as trout, are taken with more certainty than at any other time. The artificial fly, in such cases, looks like a wet fly, and allures even the grayling, which generally is more difficult to deceive than trout in the same river.—*Sir Humphry Davy.*

Grease, *s.* The soft part of the fat; a swelling and gourdiness of the legs, which generally happens to a horse after his journey.

Swelled legs, although distinct from *grease*, are apt to degenerate into it. This disease, therefore, comes next under our consideration. It is an inflammation of the skin of the heel, sometimes of the fore, but oftener of the hind foot. It is not a contagious disease, although when it once appears in a stable it frequently goes through it, for it is usually to be traced to bad stable management. The skin of the heel of the horse somewhat differs from that of any other part. There is a great deal of motion in the fetlock, and to prevent the skin from excoriation or chapping, it is necessary that it should be kept soft and pliable; therefore, in the healthy state of the part, the skin of the heel has a peculiar greasy feel. Under inflammation, the secretion of this greasy matter is stopped—the heels become red, dry, and scurfy; and being almost constantly in motion, cracks soon succeed: these sometimes extend, and the whole surface of the heel becomes a mass of soreness, ulceration, and fungus.

The first appearance of grease is usually a dry and scurfy state of the skin of the heel, with redness, heat and itchiness. The heel should be well washed with soap and water; as much of the scurf should be detached as is easily removable: white ointment composed of one drachm of sugar of lead, rubbed down with an ounce of lard, will usually supple and cool, and heal the part.

When cracks appear, the mode of treatment will depend on their extent and depth. If they are but slight, a lotion composed of a solution of two drachms of blue vitriol, or four of alum, in a pint of water, will often speedily dry them up and close them. But if the cracks are deep, with an ichorous discharge, and the lameness considerable, it will

be necessary to poultice the heel. A poultice of linseed meal will be the most effectual, unless the discharge is thin and offensive, when an ounce of finely powdered charcoal should be mixed with the linseed meal, or a poultice may be made with carrots boiled soft, and mashed. The efficacy of a carrot poultice is seldom sufficiently appreciated in cases like these.

When the inflammation and pain have evidently subsided, and the cracks discharge good matter, they may be dressed with an ointment composed of one part of resin, and three of lard, melted together, and one part of calamine powder added, when these begin to get cool. The healing will be quickened if the cracks are occasionally washed with either the vitriol or alum solution. A mild diuretic may here be given every third day, but a mild dose of physic will form the best medicine that can be administered.

After the chaps or cracks have healed, the legs will sometimes continue gorged and swelled. A flannel bandage evenly applied over the whole of the swelled part will be very serviceable; or, should the season admit of it, a run at grass, particularly spring grass, should be allowed. A blister is inadmissible, from the danger of bringing back the inflammation of the skin, and discharge from it; but the actual cautery, taking especial care not to penetrate the skin, must occasionally be resorted to.

There will be great danger in suddenly stopping this discharge. Inflammation of a more important part has rapidly succeeded to the injudicious attempt. The local application should be directed to the abatement of the inflammation. The poultices just referred to should be diligently used night and day, and especially the carrot poultice; and, when the heat and tenderness and stiffness of motion have diminished, astringent lotions may be applied; either the alum lotion, or a strong decoction of oak bark, changed, or used alternately, but not mixed. The cracks should likewise be dressed with the ointment above mentioned; and the moment the horse can bear it, a flannel bandage should be put on, reaching from the coronet, to three or four inches above the swelling.

Walking exercise should be resorted to as soon as the horse is able to bear it, and this by degrees may be increased to a gentle trot. —*The Horse.*

GREASY, *a.* Oily, fat, unctuous; smeared with grease.

GREAVES, *s.* The offal of chandlers; the animal matter which remains after the tallow has been extracted. Greaves mixed with oatmeal make excellent feeding for dogs.

GREBE, *s.* A water-fowl.

The bills of this genus are compressed on the sides, and though not large, are firm and strong, straight and sharp pointed: nostrils linear; a bare space between the bill and the

eyes; tongue slightly cloven at the end; body depressed; feathers thickly set, compact, very smooth, and glossy; wings short, scapulars long; no tail; legs placed far behind, much compressed, or flattened on the sides, and serrated behind with a double row of notches; toes furnished on each side with membranes; the inner toes broader than the outer; the nails broad and flat.

This genus is ranked by Ray and Linnæus with the diver and guillemot; but as the grebes differ materially from those birds, Brisson, Pennant, and Latham, have separated them. The grebes are almost continually upon the water, where they are remarkable for their agility: at sea they seem to sport with the waves, through which they seem to dart with the greatest ease, and, in swimming, slide along, as it were without any apparent effort upon the surface, with wonderful velocity; they also dive to a great depth in pursuit of their prey. They frequent fresh-water lakes and inlets of rivers as well as the ocean, to which they are obliged to resort in severe seasons, when the former are bound up by the ice. No cold or damp can penetrate their thick, close plumage, which looks as it were glazed on the surface, and by which they are enabled, while they have open water, to brave the rigours of the coldest winter. They can take wing from the water, or drop from an eminence, and fly with great swiftness to a considerable distance; but when they happen to alight on the land, are helpless, for they cannot either rise from the flat surface of the ground, or make much progress in walking upon it. On shore they sit with the body erect, commonly upon the whole length of their legs, and, in attempting to regain the water, they awkwardly waddle forward in the same position; and, if by any interruption they happen to fall on their belly, they sprawl with their feet, and flap their short wings as if they were wounded, and may easily be taken by the hand, for they can make no other defence than by striking violently with their sharp-pointed beak. They live upon fish, and it is said, also upon fresh water and sea-weeds. They are generally very fat and heavy in proportion to their size.

The females generally build their nests in the holes of the rocky precipices which overhang the sea-shores; and those which breed on lakes, make theirs of withered reeds and rushes, &c., and fix it among the growing stalks of a tuft, or bush, of such like herbage, close by the water's edge. They lay from two to four eggs at one hatching.

The skins of these birds are dressed with the feathers on, and made into warm beautiful tippets and muffs; the under part only is used for this purpose, and a skin of one of the species sells as high as fourteen shillings.

Great Crested Grebe.—(*Greater crested Douker, Car Goose, Ash-coloured Loon,* or *Gaunt, Colymbus cristatus,* LINN.; *Le Grêbe huppé,* BUFF.)—This bird is the largest of the grebes, weighing about two pounds and a half, and measuring twenty-one inches in length, and thirty in breadth. The bill is about two inches and a quarter long, dark at the tip, and red at the base; the bare stripe, or core, between the bill and eyes, is in the breeding season red, afterwards change to dusky; irides fine pale crimson. The head, in adult males, is furnished with a great quantity of feathers, which form a kind of ruff, surrounding the upper part of the neck; those on each side of the head, behind, are longer than the rest, and stand out like ears: this ruff is of a bright ferruginous colour, edged on the under side with black. The upper parts of the plumage are of a sooty or mouse-coloured brown; the under parts of a glossy or silvery white; the inner ridge of the wing is white; the secondaries of the same colour, forming an oblique bar across the wing when closed: the outsides of the legs are dusky, the inside and toes of a palo green.

This species is common in the fens and lakes in various parts of England, where they breed and rear their young. The female conceals her nest among the flags and reeds which grow in the water, upon which it is said to float, and that she hatches her eggs amidst the moisture which oozes through it. It is made of various kinds of dried fibres, stalks, and leaves of water plants, and (Pennant says) the roots of hugbane, stalks of water-lily, pond-weed, and water-violet; and he asserts, that when it happens to be blown from among the reeds, it floats about upon the surface of the open water.

These birds are met with in almost every lake in the northern parts of Europe, as far as Iceland, and southward to the Mediterranean; they are also found in various parts of America.

Tippet Grebe, Greater Dabchick, or Greater Loon.—(*Colymbus urinator,* LINN. *Le Grêbe,* BUFF.)—This bird differs from the last only in being somewhat less, in having its neck, in most specimens, striped downward on the sides with narrow lines of dusky and white, and in having no crest.

Modern ornithologists begin to suspect, that the tippet grebe is the female of the great crested grebe, or a young bird of that species. Latham says, "It is with some reluctance, that we pen our doubts concerning the identity of this, as a species, at least as being distinct from the great crested grebe, in contradiction to what former authors have recorded on the subject. It is certain that the last-named bird varies exceedingly at different

periods of life; and we are likewise as certain, that the birds which have been pointed out to us as the Geneva grebes, have been no other than young ones of the great crested, not having yet attained the crest; and whoever will compare Brisson's three figures of the birds in question, will find (the crest excepted) that they all exactly coincide, allowing for their different periods of ages."

Eared Grebe.—This bird measures about twelve inches in length, and twenty two from tip to tip of the wings. The bill is black, inclining to red towards the base, rather slender, nearly an inch long, and slightly bent upwards at the point, lore and irides red; the head is thickly set and enlarged with feathers of a sooty black colour, except two large loose and spreading orange-coloured tufts, which take their rise behind each eye, flow backwards, and nearly meet at their tips, the neck and upper parts of the plumage are black, the under parts of a glossy white; the sides a rusty chestnut colour; legs greenish black. The male and female are nearly alike, only the latter is not furnished or puffed up about the head with such a quantity of feathers.

This species is not numerous in the British isles. Pennant says they inhabit and breed in the fens near Spalding in Lincolnshire, and that the female makes a nest not unlike that of the crested grebe, and lays four or five small white eggs. The eared grebe is found in the northern regions of Europe, as far as Iceland, and also met with in southern climates. The circumnavigator Bougainville says, it is called the "Diver with spectacles," in the Falkland Islands.

Dusky Grebe, Black and White Dabchick, (*Colymbus nigricans*, LINN. *La petite Grêbe* BUFF.)—This species measures about an inch less in length, and two in breadth, than the last. The bill is more than an inch long, and of a pale blue colour, with reddish edges; lore and orbits red; irides bright yellow: the upper part of the head, hinder part of the neck, scapulars, and rump, are of a dark sooty or a mouse-coloured brown; the feathers on the back are nearly of the same colour, but glossy, and with greyish edges; the ridge of the wings and secondary quills are white, the rest of the wing dusky. There is a pale spot before each eye; the checks and throat are white; the fore part of the neck is light brown; and the breast and belly are white and glossy like satin; the thighs and vent are covered with dirty white downy feathers; the legs are white behind, dusky on the outer side, and pale blue on the inner sides and shins; the toes and webbed membranes are also blue on the upper sides, and dark underneath.

Red-necked Grebe (*Colymbus subcristatus, Le Jougris,* BUFF.)—This bird measures, from the bill to the rump, seventeen inches; to the end of the toes twenty-one; and weighs eighteen ounces and three quarters. The bill is about two inches long, dusky or horn-coloured on the ridge and tip, and on the sides of it, towards the corners of the mouth, of a reddish yellow; the underside of the lower mandible is also of the latter colour: lore dusky; irides dark hazel; the cheeks and throat are of a dirty or greyish white; the upper part of the head is black, with a greyish cast, and the feathers are lengthened on each side, on a line with the eyes backward, so as to look like a pair of rounded ears—these it can raise or depress at pleasure: the fore part and sides of the neck are of a dingy brown, mixed with feathers of a bright rusty red; the upper parts of the plumage are of a darkish mouse-coloured brown, lightest on the wing-coverts, deepest on the scapulars and rump, and edged with grey on the shoulders; the under parts are of a glossy white, like satin, mottled with indistinct brownish spots: primary quills brownish tawny, with dark-coloured tips; secondaries white: outer sides of the legs dusky, inner sides sallow green; webs of the outer toes flesh colour, middle ones redder, and the inner ones orange.

Pennant supposes the red-necked grebe to be only a variety of the great crested grebe; but Latham, who has been furnished with several specimens, is of opinion that it is a distinct species. He describes the adult males in full feather, as having their necks of an uniform reddish chestnut; and the younger birds, when they have not obtained their full plumage, to be only partially spotted on their necks with that colour.

Little Grebe, Dab-chick, Small Doucher, Dipper, or Didapper (*Colymbus minutus*, LINN.; *Le Castagneaux*, BUFF.)—This is the least of the grebe tribe, weighing only between six and seven ounces, and measuring, to the rump, ten inches, to the end of the toes thirteen, and about sixteen from tip to tip of the wings. The bill is scarcely an inch long, of a dusky reddish colour; irides hazel; the head is thickly clothed with a downy kind of soft feathers, which it can puff up to a great size, or lay down flat at pleasure; the cheeks are mostly of a bay colour, fading towards the chin and throat into a yellowish white. The neck, breast, and all the upper parts of the plumage, are of a brown or chestnut colour, tinged with red, lightest on the rump: the belly is white, clouded with ash-colour, mixed with red: thighs and vent grey: greater quills dark brown; the lesser white on their inner webs: legs dirty olive green.

The little grebe is a true aquatic, for it seldom quits the water, nor ventures beyond the sedgy margins of the lake where it has taken up its abode. It is a most excellent

diver, and can remain a long while under water, in pursuit of its prey, or to shun danger. It is found in almost every lake, and sometimes upon rivers, but seldom goes out to sea. Its food is of the same kind, and its habits much the same as those of the other grebes.

This species of the grebe is an inhabitant of both Europe and America.

Black-chin grebe.—This bird is described as being larger than the last. Chin black; forepart of the neck ferruginous; hinder part mixed with dusky; belly cinereous and silver intermixed. Inhabits Tiree, one of the Hebrides.—*Latham.*

Greedy, *a.* Ravenous, voracious, hungry; eager.

Green, *a.* Having a colour formed by compounding blue and yellow; flourishing, fresh; new, fresh, as a green wound; unripe, immature, young.

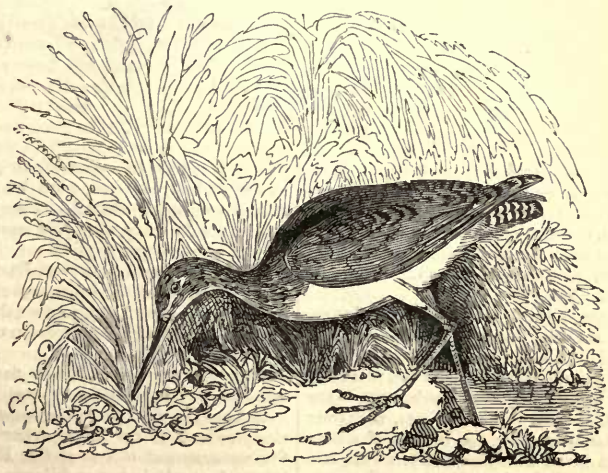
Green, *s.* One of the seven original colours; a grassy plain.

To dye green.—Boil your stuff to a very rich yellow, in turmerie, lift it, and add near a teaspoonful of best madder; boil it for five minutes, and draw what you want for the first shade; add a teaspoonful and a half of madder, and boil for the same length of time, and for as many shades as you want; follow the same plan to four or five shades; wash them well in water, then in urine, as in the other recipes. Wring them and green them, one by one, in the greening-vat; beginning with the lightest, which will green in a very few minutes. You will destroy the greens if they take too much of the blue: you must attend them closely till you finish. These are the richest of all greens, and fast colours. The lightest of them, or the next, are used for the green rail and September-green fox. If you want your greens finer, put less madder, and do not boil so long; you must here be guided by your eye.—*Old Recipe.*

Green, *v.* To make green.

Greenfinch, *s.* A small bird.

Greenshanked Godwit, or Greenlegged Horseman, (*Scolopax glottis*, Linn.; *La Barge variée*, Buff.), *s.*



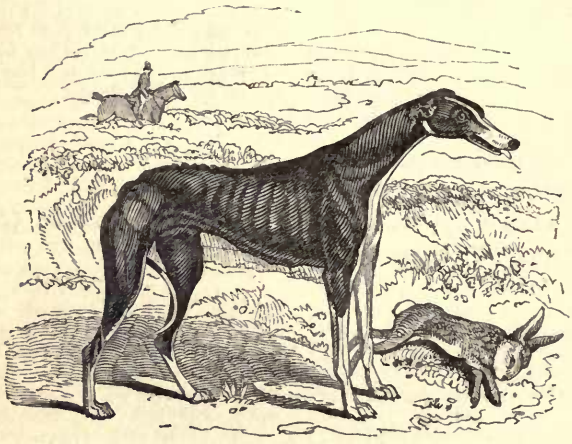
The greenshank is of a slender and elegant shape, and its weight small in proportion to its length and dimensions, being only about six ounces; although it measures from the tip of

its beak to the end of its tail fourteen inches, and to the toes twenty, and from tip to tip of the wings twenty-five. The bill is about two inches and a half long, straight and slender: the upper mandible black; the under reddish at its base. The upper parts of its plumage are pale brownish ash colour; but each feather is marked down the shaft with glossy bronze brown; the under parts, and rump, are of a pure white: a whitish streak passes over each eye; the quill-feathers are dusky, plain on the outer webs; but the inner ones are speckled with white spots: the tail is white, crossed with dark waved bars: the legs are long; bare about two inches above the knees, and of a dark-green colour: the outer-toe is connected by a membrane to the middle one, as far as the first joint.

This species is not numerous in England, but they appear in small flocks in the winter season, on the sea-shores and the adjacent marshes; their summer residence is in the northern regions of Russia, Siberia, &c., where they are said to be in great plenty; they are also met with in various parts of both Asia and America. Their flesh, like all the rest of this genus, is well flavoured, and esteemed good eating.—*Bewick.*

GREGARIOUS, *a.* Going in flocks or herds.

GREYHOUND, *s.* A tall fleet dog that chases by sight. Of this species the varieties are numerous, and are generally named after the countries to which they originally belong.



The Irish greyhound.—(*Canis Graius Hibernicus*, RAY.)—This is one of the largest of the canine race, with an air at once beautiful, striking, and majestic. He has been known to grow to the extraordinary height of four feet, although the general standard is about three feet.

In shape, the Irish greyhound somewhat resembles the common greyhound, only that he is much larger, and more muscular in his formation; clumsy in all his different parts, and is quite unserviceable for hunting either the stag, fox, or hare. His chief use, in former times, was in clearing the country of wolves and wild boars, for which his great size and strength peculiarly adapted him.

The colour of the Irish greyhound is a pale cinnamon or fawn. His aspect is mild, and his disposition gentle and peaceable. It is said he is greatly an overmatch for either the mastiff or bull dog; and when he fights, he generally seizes his antagonist by the back, and shakes him to death, which his great strength enables him to do with ease.

M. Buffon supposes the great Danish dog to be only a variety of the Irish greyhound; and Mr. Pennant was of opinion that the French matin and the Albian dog were also varieties of the same.

The Irish greyhound is now rarely to be met with even in his native country.

Aylmer Bourke Lambert, Esq., one of the vice-presidents of the Linnæan Society, took the measurement of one of the Marquis of Sligo's dogs, which was as follows:—"From the point of the nose to the tip of the tail, sixty-one inches; tail, seventeen and a half inches long; from the tip of the nose to the back part

of the skull, ten inches; from the back part of the skull to the beginning of the tail, thirty-three inches; from the toe to the top of the fore-shoulder, twenty-eight inches and a half; length of the leg sixteen inches; from the top of the hind toes to the hind shoulders, thirteen inches; from the point of the nose to the eye, four inches and a half; the ears, six inches long; round the widest part of the belly, (about three inches from the forelegs,) thirty-five inches; twenty-six inches round the hinder part, close to the hind legs; the hair short and smooth; the colour of some brown and white, of others black and white.

They seemed good-tempered animals, but, from the accounts Mr. Lambert received, it is obvious that they must have degenerated, particularly in point of size.

Dr. Goldsmith says he has seen a dozen of these dogs, and assures us the largest was about four feet high, and as tall as a calf of a year old.

Scottish Highland Greyhound or Wolf Dog, (*Canis Caledonius.*)—This is a large and powerful dog, nearly equal in size to the Irish greyhound. His general aspect is commanding and fierce; his head is long, and muzzle rather sharp; his ears pendulous, but not long; his eyes large, keen, and penetrating, half concealed among the long, stiff, bristly hair with which his face is covered; his body is very strong and muscular, deep-chested, tapering towards the loins, and his back slightly arched; his hind-quarters are furnished with large prominent muscles; and his legs are long, strongboned, and straight,—a combination of qualities which gives him that speed and long duration in the chase for which he is so eminently distinguished. His hair is shaggy and wiry, of a reddish colour, mixed with white: his tail is rough, which he carries somewhat in the manner of a stag-hound, but not quite so erect.

This is the dog formerly used by the highland chieftains of Scotland in their grand hunting parties, and is in all probability the same noble dog used in the time of Ossian.

The Scotch Highland greyhound will either hunt in packs or singly.

The Russian Greyhound, (*Canis Graius Borealis.*)—This is a large and powerful dog, nearly equal in strength to the Irish greyhound, which he also resembles in shape; his hair is long and bushy, and his tail forms a spiral curl, but which in the chase stands nearly straight behind him. The colour of the Russian greyhound is generally of a dark umber brown, but sometimes black: his coat is rough and shaggy.

When the Russian greyhound loses sight of the hare, he runs by the scent. Indeed, when parties go out a coursing, this dog even endeavours to find game. He is a very powerful animal, and is frequently used either in small packs, or with other dogs, to hunt the wild boar, deer, or wolf, the latter of which a good hound will kill singlehanded. But it is the deer principally that he hunts. When used in coursing, he is slipped in the same manner as is practised in this country.

The Scotch Greyhound, (*Canis Graius Scotius.*)—This dog, in point of form, is similar in all respects to the common grey-hound, differing only in its being of a larger size, and the hair being wiry, in place of that beautiful sleekness which distinguishes the coat of the other. Their colour for the most part is of a reddish brown or sandy hue, although they are sometimes to be met with quite black. I saw some powerful animals of this description in the north of Ireland, in possession of the small farmers and peasants of the mountainous districts. They are said to be the only dogs which are capable of catching the hares which inhabit those mountain ranges,—the common grey-hound wanting strength for such a laborious chace. These dogs in Ireland are almost universally dark iron grey, with very strong grizzly hair, and are much superior in many respects to any I have seen in Scotland. I remark a peculiarity in those Irish hounds, which was that of having very small but extremely brilliant and penetrating hazel-coloured eyes; their teeth were also very strong and long.

We are informed by Topsel, that the dog was used for tracing thieves in Scotland, and also on the borders of England, and that he had an excellent sense of smelling. Even at the present day he has the sense in a more acute state than the common greyhound; and it is probable that in early times he was still more distinguished by an active power of scent.

The Italian Greyhound, (*Canis Graius Italianus.*)—Is about half the size of the common greyhound, and is perfectly similar in form. His shape is exquisitely beautiful, and he has a most delicate appearance. The general colour of this handsome dog is a pale mouse brown, sable, or white. The skin is very sleek, and the hair extremely fine and short. He does not thrive well in Great Britain, the climate being too cold for his delicate constitution.

The Italian greyhound is too small to have sufficient speed for taking a hare, and is in consequence never employed in the chace, his principal use being an attendant on the great. In Italy, men of rank are frequently seen either walking or riding followed by several of these dogs.

Turkish Greyhound, (*Canis Egyptius,* Linn.)—This is a diminutive variety of the greyhound, probably reduced to its smallest size from the influence of climate. It is little more than half the bulk of the Italian greyhound, and like the same animal, both in this

country and in Italy, is an attendant on people of rank, and usually kept as a pet.

The Turkish greyhound is quite naked, with only a few scattered hairs on its tail. The colour of the skin is leaden or black, and has all the appearance of leather. His ears are long and erect. This dog is said to possess great attachment to his master. We have heard of one which belonged to a pacha who was beheaded, that laid itself down on the body of his murdered master and expired.

It is said that the greyhound of Great Britain when taken to Turkey, quickly degenerates, and becomes a poor spiritless animal, without the least desire for sporting. This is not peculiar to the greyhound, but extends to all dogs brought from temperate climates.

Sonnini, who travelled through the Ottoman empire, mentions that he endeavoured by every means in his power to ascertain whether this singular dog was really a native of Turkey, but that he had sought in vain for it in that country. He further remarks, that it is not in the temperate climate of Turkey that dogs lose their hair, nor even under the burning sun of Egypt.

* * *

The breeding of the greyhound is recommended to be from the well tried and best bitches, as an indifferent dog was supposed from such a cross, to get better whelps than if the excellence was inverted, and the bitch but tolerable; the surest way to have the whelps excellent, is to have both sire and dam good, and not to exceed four years old; if any inequality in their age, it is recommended to be on the bitch's side, provided the dog be young.—*Brown.*

GRIG, *s.* A small eel.

GRIMALKIN, *s.* A cat.

GRIN, *v.* To set the teeth together, and withdraw the lips; to fix the teeth as in anguish.

GRIPE, *v.* To hold with the fingers closed; to catch eagerly; to seize; to clutch.

GRISTLE, *s.* A cartilage.

GRISTLY, *a.* Cartilaginous.

GRIT, *s.* The coarse part of meal; oats husked, or coarsely ground; sand; rough hard particles; a kind of fish.

GRIZZLE, *s.* A mixture of white and black; grey.

GRIZZLED, *a.* Interspersed with grey.

GROAT, *s.* A piece valued at fourpence; groats, oats that have the hulls taken off.

GROGGINESS, *s.* A disease incident to horses.

The peculiar knuckling over of the fetlock joint, and tottering of the whole of the foreleg, known by the name of *grogginess*, and which is so often seen in old and over-worked horses, is seldom an affection of either the fetlock or the pastern-joints simply, although these have their full share in the mischief that has been produced by tasking the poor animal beyond his strength. Sometimes it is difficult to fix on any particular joint; at others, it seems to be traced to a joint deep in the foot, where the flexor tendon runs over the navicular bone. It seems oftenest to be a want of power in the ligaments of the joints generally, produced by frequent and severe sprains, or by ill-judged and cruel exertion; and, in the majority of cases, admits of no remedy; especially as dissection often discovers ulceration within the joints, and of the membrane which lines the cartilage, and even of the cartilage itself, which it was impossible to reach or to remove.

GROOM, *s.* A servant that takes care of the stable.

GROOVE, *s.* A deep cavern or hollow; a channel or hollow cut with a tool.

GROSS, *a.* Thick, corpulent; inelegant; coarse, rough, opposite to delicate.

GROUND-BAIT, *s.* A bait made of barley or malt boiled, thrown into the place where fish are to be collected.

GROUNDLING, *s.* A fish which keeps at the bottom of the water.

Grouse, *s.* A kind of fowl, a heathcock.

The Wood Grouse, Cock of the Wood, or *Capercalzie.*—(*Tetrao urogallus*, Linn. *Legrand Coq de Bruyère*, Buff.)—This bird is as large as the turkey, is about two feet nine inches in length, and weighs from twelve to fifteen pounds. The bill is very strong, convex, and of a horn colour; over each eye there is a naked skin, of a bright red colour; the eyes are hazel; the nostrils are small, and almost hid under a covering of short feathers, which extend under the throat, and are there much longer than the rest, and of a black colour; the head and neck are elegantly marked with small transverse lines of black and grey, as are also the back and wings, but more irregularly; the breast is black, richly glossed with green on the upper part, and mixed with a few white feathers on the belly and thighs; the sides are marked like the neck, the tail consists of eighteen feathers, which are black, those on the sides are marked with a few white spots; the legs are very stout, and covered with brown feathers; the toes are furnished on each side with a strong pectinated membrane. The female is considerably less than the male, and differs from him greatly in her colours; her throat is red; the transverse bars on the head, neck, and back, are red and black; the breast is of a pale orange colour; belly barred with orange and black, the top of each feather white; the back and wings are mottled with reddish brown and black; the scapulars tipped with white; the tail is of a deep rust colour, barred with black, and tipped with white.

This beautiful kind is found chiefly in high mountainous regions, and is very rare in Great Britain. Mr. Pennant mentions one, as an uncommon instance, which was shot near Inverness. It was formerly met with in Ireland, but is now supposed to be extinct there. In Russia, Sweden, and other northern countries, it is very common: it lives in the forests of pine with which those countries abound, and feeds on the cones of fir trees, which, at some seasons, give an unpleasant flavour to its flesh, so as to render it unfit for the table; it likewise eats various kinds of plants and berries, particularly the juniper. Early in the spring the season for pairing commences; during this period the cock places himself on an eminence, where he displays a variety of pleasing attitudes; the feathers on his head stand erect, his neck swells, his tail is displayed, and his wings trail almost on the ground; his eyes sparkle, and the scarlet patch on each side of his head assumes a deeper dye; at the same time he utters his well-known cry, which has been compared to the sound produced by the whetting of a scythe; it may be heard at a considerable distance, and never fails to draw round him his faithful mates. The female lays from eight to sixteen eggs, which are white, spotted with yellow, and larger than those of the common hen: for this purpose she chooses some secret spot, where she can sit in security: she covers her eggs carefully over with leaves, when she is under the necessity of leaving them in search of food. The young follow the hen as soon as they are hatched, sometimes with part of the shell attached to them.

The Black Grouse, Black Game, or

Black Cock.—(*Tetrao Tetrix*, Linn.; *Le Coq de Bruyère à queue fourchue*, Buff.)—This bird, though not larger than the common hen, weighs nearly four pounds: its length is about one foot ten inches, breadth two feet nine. The bill is black, the eyes dark blue; below each eye there is a spot of dirty white colour, and above a larger one, of a bright scarlet, which extends almost to the top of the head; the general colour of the plumage is a deep black, richly glossed with blue on the neck and rump; the lesser wing coverts are dusky brown; the greater are white, which extends to the ridge of the wing, forming a spot of that colour on the shoulder when the wing is closed; the quills are brown, the lower parts and tips of the secondaries are white, forming a bar of white across the wing; there is likewise a spot of white on the bastard wing; the feathers of the tail are almost square at the ends, and, when spread out, form a curve on each side; the under tail coverts are of a pure white; the legs and thighs are of a dark brown colour, mottled with white; the toes are toothed on the edges like those of former species. In some of our specimens the nostrils were thickly covered with feathers, whilst in others they were quite bare, probably owing to the different ages of the birds.

These birds, like the former, are found chiefly in the high situations in the northern parts of our island; they are common in Russia, Siberia, and other northern countries: they feed on various kinds of berries and other fruits, the produce of wild and mountainous places: in summer they frequently come down from their lofty situations for the sake of feeding on corn. They do not pair, but, on the return of spring, the males assemble in great numbers at their accustomed resorts, on the tops of the high and heathy mountains, when the contest for superiority commences, and continues with great bitterness till the vanquished are put to flight: the victors, being left in possession of the field, place themselves on an eminence, clap their wings, and with loud cries give notice to their females, who immediately resort to the spot. It is said that each cock has two or three hens, which seem particularly attached to him. The female is about one-third less than the male, and differs from him considerably in colour, her tail is likewise much less forked. She makes an artless nest on the ground, where she lays six or eight eggs of a yellowish colour, with freckles and spots of a rusty brown. The young cocks, at first, resemble the mother, and do not acquire their male garb till towards the end of autumn, when the plumage gradually changes to a deeper colour, and assumes that of a bluish black, which it afterwards retains.

Red Grouse, *Red Game*, *Gorcock* or *Moorcock.*—(*Tetrao Scoticus*, Linn.; *L'Altagas*, Buff.)—The length of this bird is fifteen inches; the weight about nineteen ounces. The bill is black; the eyes hazel; the nostrils shaded with small red and black feathers; at the base of the lower bill there is a white spot on each side; the throat is red: each eye is arched with a large naked spot, of a bright scarlet colour; the whole upper part of the body is beautifully mottled with deep red and black, which gives it the appearance of tortoise-shell; the breast and belly are of a purplish hue, crossed with small dusky lines; the tail consists of sixteen feathers of equal length, the four middlemost barred with red, the others black; the quills are dusky; the legs are clothed with soft white feathers down to the claws, which are strong, and of a light colour. The female is somewhat less; the naked skin above each eye is not so conspicuous, and the colours of her plumage in general are much lighter than those of the male.

This bird is found in great plenty in the wild, heathy, and mountainous tracts in the northern counties of England: it is likewise common in Wales and the Highlands of Scotland. Mr. Pennant supposes it to be peculiar to Britain; those found in the mountainous parts of France, Spain, Italy, and elsewhere, as mentioned by M. Buffon, are very probably varieties of this kind, and no doubt would breed with it. It is to be wished that attempts were more frequently made to introduce a greater variety of these useful birds into this country, to stock our waste and barren moors with a rich fund of delicate and wholesome food; but till the legislature shall alter or abrogate our very unequal and injudicious game laws, there hardly remains a single hope for the preservation of such birds of this species as we now have.

Red grouse pair in spring; the female lays eight or ten eggs on the ground. The young ones follow the hen the whole summer; as soon as they have attained their full size, they unite in flocks of forty or fifty, and are then exceedingly shy and wild.

White Grouse, *White Game* or *Ptarmigan.*—(*Tetrao Lagopus*, Linn.; *La Lagopède*, Buff.)—This bird is nearly the same size as the red grouse. Its bill is black; the upper parts of its body are of a pale brown or ash colour, mottled with small dusky spots and bars; the bars on the head and neck are somewhat broader, and are mixed with white; the under parts are white, as are also the wings, excepting the shafts of the quills, which are black. This is its summer dress, which in winter is changed to a pure white, excepting that in the male there is a black line between the bill and the eye. The tail consists of sixteen feathers; the two middle ones are ash-coloured in summer and white in winter;

the next two are slightly marked with white near the ends; the rest are wholly black; the upper tail coverts are long, and almost cover the tail. The white grouse is fond of lofty situations, where it braves the severest cold; it is found in most of the northern parts of Europe, even as far as Greenland. In this country it is not to be met with on the summits of some of our highest hills, chiefly in the Highlands of Scotland, in the Hebrides and Orkneys, and sometimes, but rarely, on the lofty hills of Cumberland and Wales. Buffon, speaking of this bird, says that it avoids the solar heat, and prefers the biting frosts on the tops of mountains; for as the snow melts on the sides of the mountains, it constantly ascends till it gains the summit, where it forms holes and burrows in the snow. They pair at the same time as the red grouse; the female lays eight or ten eggs, which are white spotted with brown. She makes no nest, but deposits them on the ground. In winter they fly in flocks, and are so little accustomed to the sight of man, that they are easily shot or taken in a snare. They feed on the wild productions of the hills, which sometimes give the flesh a bitter but not unpalatable taste; it is dark-coloured, and, according to M. Buffon, has somewhat the flavour of the hare. * * *

Hunting for grouse during the basking hour of the day, is rigidly prohibited by all gentlemen who compile sporting directories; and yet every shooter knows, that at these proscribed hours himself is commonly on the moors. Morning and evening, when the birds are on foot in search of food, is undoubtedly preferable to the duller portion of the day, when they are accustomed to indulge in a *siesta*. But, generally, some considerable distance must be travelled before the sportsman can reach his beat from his quarters. The morning is consumed on horseback or in the shooting-cart; the same road must be again accomplished before night; and hence the middle of the day is, of necessity, the portion devoted to pursuit of game.

To find the birds when, satisfied with food, they leave the moor to bask in some favourite haunt, requires both patience and experience; and here the mountain-bred sportsman proves his superiority over the less-practised shooter. The packs then lie closely, and occupy a small surface on some sunny brow or sheltered hollow. The best nosed dogs will pass within a few yards, and not acknowledge them; and patient hunting, with every advantage of the wind, must be employed to enable the sportsman to find grouse at this dull hour.

But if close and judicious hunting be necessary, the places to be beaten are comparatively few, and the sportsman's eye readily detects the spot where the pack is sure to be discovered. He leaves the open feeding-grounds for heathery knowes and sheltered valleys; and while the uninitiated wearies his dogs in vain over the hill-side, where the birds, hours before, might have been expected, the older sportsman profits by his experience, and seldom fails in discovering the dell or hillock, where, in fancied security, the indolent pack is reposing.—*Bewick—Wild Sports.*

Grub, *s.* A small worm that eats holes in bodies; a thick short man.

Gruel, *s.* Food made by boiling oatmeal in water.

Gruel is a useful drink for horses on many occasions, and, when made carefully, sweetened with treacle or sugar, and sometimes seasoned with salt, they will often drink it, and save the trouble of drenching. It is a good vehicle for such medicines as are of a stimulating or acrimonious nature, such as oil of turpentine. Gruel is made either with oatmeal or grits, barley meal or pearl barley, fine wheat flour or arrow root; it may be made also with sago, salep or tapioca; either of these to be boiled in water, and, for some purposes, in milk and broth.

Gruel is often made merely by stirring some oatmeal into warm water, but it is better when boiled: and when grits or pearl barley are employed, it should be boiled a short time, and the first water thrown away; the gruel will then be free from an unpleasant taste which these substances contract by keeping: when they are first crushed or bruised, the gruel is richer, and more expeditiously made. Gruel is a useful restorative for weak or convalescent horses, being very nutritious and easy of digestion; perhaps nothing is more nutritious than wheat flour gruel made with milk and sweetened with sugar. In India it is a common practice to give horses strong broths, thickened with grain or flour, and seasoned with pepper or other spices, when they work hard, or as a restorative cordial. Infusion of malt makes a good nutritive drink for horses; but good *sweet* grits make an excellent gruel. Oatmeal is sometimes musty, and gruel made with it has often some degree of bitterness. When gruel is given as a cordial restorative after hard work, a little beer and ginger may, on some occasions, be added. Horses are very nice in their drinking, therefore the gruel should be made in a clean saucepan, free from the smell of meat, smoke, or fat. For some purposes, or where it is inconvenient to boil the gruel, a little oat, barley, or wheat meal, may be stirred into warm or cold water. This in Ireland is termed a *white drink*.—*White.*

GRUNT, *v.* To murmur like a hog. GRUNTER, *s.* A kind of fish.

GUAIACUM, *s.* A physical wood; lignum vitæ.

A resinous looking substance, extracted from a very dense wood of a tree growing in the West Indies, called *Guiacum officinale.* It is little used in veterinary prescriptions.—*Ure.*

GUDGEON, *s.* A small fish of the carp kind, found in brooks and rivers.

GUERNSEY PARTRIDGE (*Perdrix rufa*, RAY), *s.*

This bird is rather larger than the common species. Bill, irides, and legs red; the upper part of the head is red-brown; greyish on the forehead; chin and throat white, encircled with black; over each eye a band of white; fore part and sides of the neck cinereous, spotted with black; back, wings, and rump, grey-brown; breast pale ash-colour; belly rufous; sides marked with linular streaks of black, white, and orange; the tail composed of sixteen feathers of a rufous-colour, except the six middle ones, which are more or less grey-brown.

The habits of this species differ somewhat from the common partridge. This frequently perches on a tree, and will breed in confinement, which the other is never known to do.

Mr. Daniel says that they are now plentiful near Oxford, the Marquis of Hertford having imported many thousand eggs, which were hatched under hens, and liberated; and so early as 1777, he says he saw a covey, consisting of fourteen of these birds, several of which he shot; many coveys may be found in the neighbourhood of Ipswich, on preserved manors, where they seem to prefer the waste heathy ground to corn-fields, the favourite haunts of the common species.

It is a curious fact, that the Guernsey partridge should be so much changed in its nature by passing the British Channel from Picardy to Kent, not above the third of a degree in difference of latitude, and yet, prolific as they are on the south side of the Channel, they become less inclined to propagation, even in the same sort of soil, in the north, which has rendered every exertion to naturalise them to any extent ineffectual.

This species is very plentiful in Spain and Portugal, frequenting the vineyards, especially in winter. Bechstein informs us that they have been found in Austria and Bohemia, where, however, they are, as with us, very rare in a wild state. Woody and mountainous countries, he adds, seem to please them more than the plains. Wheat and corn of all sorts, with the leaves of several plants, and insects in turn, furnish them with their food; they never become so familiar as the quail, but sufficiently so to breed in the aviary.

Why this should be called Guernsey partridge we cannot imagine, since we are credibly informed it is very rare in that island. The common species breed there, but are scarce; whether this ever bred there is uncertain, though they are known to breed in the island of Jersey. It is also found in various parts of Asia and Africa, and is called by the name of the Red-legged Partridge.—*Montagu.*

GUINEA-HEN, *s.* A small Indian hen.

The Pintada, or Guinea Hen, has been said to unite the character and properties of the pheasant and the turkey. It is about the size of the common hen, but standing high upon its legs gives it the appearance of a larger size. The back is round, with the tail turned downwards, like the partridge. It is an active, restless, and courageous bird, and will even attack the turkey, although so much above its size. The Guinea fowls assimilate perfectly with the common species, in habits and in kinds of food; but have this peculiarity, that the cocks and hens are so nearly alike, it is difficult to distinguish them. They have also a peculiar gait and cry, or chuckling. The head is covered with a kind of casque, with wattles under the bill, and the whole plumage is either black or dark grey, speckled with regular and uniform white spots. The pintada is generally supposed to be a native of Guinea, whence its additional name; but it is in equal plenty in America. In those countries it perches on trees, and, in a wild state, makes its nest in the holes of the palm tree. It is gregarious, and often found in large flocks. Like the peacock, it may be said to be universally domesticated.

There is sometimes, but not invariably, a distinction of colour in certain parts, between the cock and hen pintada; the manner and gait of the cock, however, soon distinguish him. However long domesticated, these birds retain some part of their original wild habits, and will stray in search of a place in which to drop their eggs, without any apparent solicitude as to their security. They lay an abundance of eggs, smaller than those of the common hen, speckled, resembling wild, rather than common, eggs. It sometimes happens that they are everlasting layers, in

which case, and indeed generally, it is most profitable to hatch pintadas under a common hen, which will cover an additional number of those small eggs. The chicks are extremely tender, and should not be hatched too early in the spring; a sudden change of the wind in March, to the north-east, has destroyed many a brood of them.—*Moubray.*

Guinea-pig, *s.* A small animal with a pig's snout.

Gulf, *s.* A bay, an opening into land; an abyss, an immeasurable depth; a whirlpool; a sucking eddy.

Gull (*Larus canus*, Linn.), *s.* A sea bird.

This species weighs fifteen or sixteen ounces; length about seventeen inches; bill yellow; irides hazel. The head, neck, tail, and under parts of the body, white; the back, scapulars, and wing coverts, ash-colour—the former tipped with white; the primary quills black; the two or three first have a spot of white across the ends, but the tips are black—the rest are tipped with white; the secondaries, like the back, tipped with white; legs dull white, or tinged with green.

This is one of the most plentiful species found on our coast. They breed upon the ledges of the rocks close to the sea-shore, sometimes not far above the water.

The eggs are two or three in number, of a dull olive-brown, blotched with dusky, the size of a small hen's. When disturbed they are exceedingly clamorous, and not much alarmed by being shot at. They are frequently seen in winter, at a considerable distance from the coast, and in severe weather they flock with the rooks. They follow the plough for the sake of the larvæ of the chaffer (*Scarabæus melolontha*), and of worms. The young are brown, mottled with white, the tail having a brown bar near the end; the white commences in the second year, and the spots on the wing and the bar on the tail gradually disappear.—*Montagu.*

Gullet, *s.* The throat, the meat-pipe.

Gum, *s.* A vegetable substance, differing from a resin in being more viscid, and dissolving in aqueous menstruums; the fleshy covering which contains the teeth.

Gummy, *a.* Consisting of gum, of the nature of gum; overgrown with gum; soft, flaccid.

Gun, *s.* The general name of fire-arms; the instrument by which shot is discharged by fire.

Agilis. You seem very decided as to your opinion of the relative value between London-made guns, and those at a much less price manufactured in the country. In what qualities do you suppose the advantages to consist, and how do you prove these qualities may not exist as well in a country as a London-made gun? Pray state your opinion at length. I have never heard the matter fully discussed, though I have certainly seen much confidence shown by the advocates of each.

Peritus. The value is derived from four causes: goodness of raw material, temper, close fitting, and adaptation of the several parts to each other, in shape, position, and substance, as fittest to fulfil the duties for which they are separately and collectively intended, in the production or convenience, permanence, and effect.

Let us consider this in the same light in which we should view any other branch of merchandise; first, it must be conceded, that wherever the best maker may be, there the highest quality of produce will be found; it is *likely*, therefore, that the material offered to the London maker will be superior to that brought for sale to the comparatively small consumer (in price if not in quantity) in the country; the well-known competition existing between all London makers, renders it probable that he will use his utmost exertions to secure this advantage in the highest degree. Secondly: with regard to temper there are two things to be considered, namely, the degree of hardness required to prevent a movement from wearing itself away; and next, with reference to its action upon other parts in contact with it, as in some machines we have wheels bushed with brass to diminish friction. Great tact is requisite in this matter; first, to know the temper required; secondly, to give it. The workman who can effect this, is valuable in proportion to his knowledge; is he likely to remain in the country at low wages, or to become the servant of the highest bidder? Close-fitting: an accurate eye and practised hand are absolutely necessary to effect this, which is a main

cause of permanence in a gun-lock, as thereby all parts bear their even proportion of stress, and (the temper and position of all parts being correct) an even wear is the result. But the most practised workman requires an extension of time, in some degree proportionate to the goodness of his work, comparing it with that of others less skilful, and this adds to the price; the London maker can best afford to pay that price.

Lastly, the fitness of the parts for the duties they have to fulfil. It may be said here, that the greater the quantity of material manufactured, the greater degree of knowledge must be attained by the manufacturer. Assuming then that the superiority of material is shown, we have to prove that the cheap manufacturer either cannot, by quantity, obtain such a knowledge of the requisite shape of the parts of a gun, as, when put together, shall make it equal to that of a London maker; or, if in possession of that knowledge, cannot, in the same degree, avail himself of it. Supposing, then, that he does take the pattern of the most approved shape for his guide (a circumstance we find not to be commonly the case), or even in the absence of equal opportunities of comparison, that great spur to improvement, can invent a better shape than others, this can only refer to the handling of the gun; its working, as before shown, depending so much upon material, temper, and putting together, that it possesses the form of goodness only, without the reality; and as well might you expect to procure an article of dress equally convenient, lasting, and fitting, of a country tailor, as that which may be had of a first-rate workman in London, as procure an article of the nature of a gun of the same degree of excellence in the country as in town.

Agilis. Have you not omitted the consideration, that all workmen can work cheaper in the country, from the diminished price of food and house-rent, than in large towns; as also the enormous profits made by London gun-makers?

Peritus. The advantage you here mention, does not come into play—it is a matter of consideration for the workman alone. I would admit it, did I consider that the workman himself was ill-paid, but the contrary is the fact. It has already been conceded, that, although a gun progresses in value as it progresses in price, yet not in an equal ratio, and part of the difference consists in the greater (I might most say undue) pay, in proportion to his labour, which a first-rate workman can procure; and secondly, in the great credit which any one maker may obtain over others from the known excellence of his work: these latter are two little monopolies, and must be paid for while they exist; but it is your business to fix a limit upon this by selecting from the best makers, and procuring the most for your money; and you may be certain, that although large manufactories can be carried on with greater advantage in the country, in circumstances where moderate ability is required, and many hands used, and machinery can also be called into play upon the same terms, yet superior manual dexterity will always overcome the difference of dearness of living and present itself where there is and ever must be the greatest mart, and most continued as well as highest bidders for it; to wit, in that place where the manufacture to be produced is in the highest credit and perfection. And as these two will, therefore, continue to operate upon each other, the demand for guns and the perfection of their manufacture, will draw the best workmen, and they will again produce the most perfect guns: and London will thus continue the best mart for the buyer as well as the seller, until some other city spring up, where the purchasers of the article become more numerous, and the talents of the workmen more appreciated.

* * *

That our times should be as far distinguished for increased effect and superior elegance in the formation of fire-arms, as for any other mechanical improvement, will be admitted by all but the most prejudiced of the old school. Antique gunners may still be found, who are obstinate in preferring the flint to the percussion plan. But any person who has suffered the disappointments that the best guns on the former principle will entail upon those who carry them, and particularly in wet and stormy weather, will freely admit the wonderful advantages that simple and effective invention, the copper-cap, confers upon the modern sportsman. The misery entailed upon the man who in rain and storm attempts to load and discharge a flint gun, may be reckoned among the worst upon the human catalogue; and if he who has suffered repeated disappointments of eternal misses and dilatory explosions from a thick flint and a damp pan, tried the simple and elegant improvement now in general use, he would abandon the stone gun for ever.

It has been said that gun-making is only brought to perfection in London, and that the Irish are not able to compete with their English rivals. I am, I confess, decidedly partial to a London gun; and while I admit that I have occasionally met with excellent fire-arms produced by Dublin makers, yet they are, in finish and elegance, generally behind those which one gets from any of the leading artists in the great metropolis. To point to any particular name among the host of London makers, would be absurd. From more than a dozen a person will be certain of obtaining a first-rate implement; and from the Mantons, Purdy,

Egg, and many others, guns of the most efficient qualities and beautiful finish will be procured.

* * *

Trial between French and English Guns.—We then made trial of some guns of the manufactory, and it may be reasonably supposed the best were selected. I had only brought two of my own, one of which was my coach gun, not more than two feet long, but even this far surpassed those produced by the manufactory. They made some shots at the distance of ninety-eight yards, but did not succeed.

It was afterwards agreed to have a full and fair trial of my guns against the manufactory, and each party was naturally anxious for success. The Poker, or Bonaparte, as the gun is termed, opened the ball, and she threw her shot so exactly, that the French admitted, "une mouche ne pouvoit pas l'echapper."

Theirs in return failed, after which they assayed about four others. The next was my air gun, at ninety-three yards, against their rifle. I shot within an inch of their mark though it was not fully pumped; the day was extremely sultry, and yet my next shot was still more exact.

The next trial was my double rifle, which was, apparently, greatly in their favour, as the sight to a single rifle is far more accurate. On preparing to reload, I found that, owing to some mistake, the loader and the bullet moulds were either lost or mislaid. However, some bullets were found to fit, and, after loading with powder merely by guess, I made eight shots, each sufficient to pierce through a deer's head, and one even touched the edge of the white.

We had several other trials both with rifles and air guns, but the result afforded a convincing proof of the superiority of the English manufactures: several bets were made on this occasion, and general Beaumont, the appointed judge, decided impartially in favour of my guns, but, out of respect for the civilities I had received, I ordered a single and double barrelled gun of the best make.

* * *

The mounting of their guns at Versailles is certainly excellent, and the carving of their stocks is most beautifully conceived and is capitally executed, but their barrels are not fitted in that workman-like manner which constitutes a striking excellence in the English manufactories. They are also very inferior to my countrymen in the art of browning, and in the construction of their locks.

The manufactory at Versailles was under the patronage of the First Consul, and he frequently ordered the most costly pieces, as presents for foreign princes, or general officers; one gun was produced which was then completing for the Consul, at the price of eight hundred guineas. The sum was certainly very great, but I remember receiving a fowling piece as a present from Lord Rockingham, which cost his lordship four hundred guineas, in consequence of my having killed a sparrow, which had perched on the top of Wentworth house.

* * *

Anno 1712, a brass gun was advertised to be shot for, at Hoxton, which was in the shape of a walking cane, might be used either as a gun or pistol, and which contained a telescope, a dial on the head, and a perpetual almanac.

* * *

Directions for cleaning guns.—Let your barrels be first washed perfectly clean with cold, and then fill each of them with hot water; which, by the time it has nearly run out at the touch-holes, will accelerate their being wiped dry, as much as though boiling water had been used; and before they have completely discharged the water, stop the muzzles and touch-holes; and after shaking it up and down in the barrels, turn it out at the muzzles, by which means you will effectually stir up and expel any extraneous matter that may have lodged in the bottom of the chambers. To ascertain this, hold them with the touch-holes towards the window, and (with the breechings which I have recommended) you will, by looking into each muzzle, plainly perceive the light in the chamber appearing like one dot surrounded by two (and sometimes three) rings. I have recommended washing guns with cold water, from having found that it always more readily removes the foulness occasioned by the powder, which, from sudden heat, is apt, at first, to dry and adhere more closely to the calibre: whereas, with cold water, it remains in a moist state, and immediately mixes.

In cleansing barrels, a little fine sand may not be amiss, and will generally answer in removing the lead. If hot water should be required for this purpose, the gun may be scoured with it, after having been washed with cold.

Gun-makers generally apply hot water to clean the barrels if much leaded, and afterwards finish with cold; but cold water is best, and the tow being strewed over with steel-filings, will better remove the lead, and at the same time do no injury to the inside polish of the barrel.

Every shooter should have the breeches of his guns taken out at least twice a year. To undo them without springing the barrels, let him use tallow and wax mixed, and anoint the threads; steeping the barrels in warm water before trying to unscrew them; any fault may be easily discovered by thus inspecting the barrels.

* * *

If a stupid fellow wedges dry tow into your gun, with the cleaning rod, pour boiling water on it, and the rod may then be turned round

and drawn out. I remember this occurred with a large punt-gun, at which I caught four men hauling away most unmercifully, but to no effect; I luckily came by and saved the destruction of the cleaning-rod, if not the injury of the barrel, by suggesting this simple contrivance.

* * *

TECHNICAL TERMS USED BY GUN-MAKERS.

Bolts—Pieces of iron, which fasten the barrel to the stock.

Bridle—The polished piece of steel, which caps the tumbler; it is secured by two screws, and also the scear-screw.

Cap—The covering for the worm of the ramrod.

Chain or Swivel—A little catch attached to the neek of the tumbler, which receives the end of the mainspring.

Chamber—Centre tube in breeching. Antechamber is the smaller tube, leading from this to the touch-hole.

Cock-screw—That which fastens the flint.

Cup—The concave at the top of the improved breechings.

Escutcheons, ornamental—Pieces of silver, to prevent bolts from wearing the stock; and also the shield on which the crest and cipher are engraved.

Face of the Hammer—The part which, by coming in contact with the flint, strikes fire.

False Breeching—The part where the nose of the breechings hook in, before the barrels can be laid in the stock.

False Breech-screw—Passes through the stock into the trigger-plate, and screws them together.

Fence—The part between cock and pan, on which is received the solid cock.

Guard—Curved plate to defend the triggers.

Hammer-spring—That on which the hammer is moved.

Hammer-bridle—A part which the tail of the hammer works in.

Heel-plate—The plate with which the butt is tipped.

Jaw—Lips of the cock, to hold the flint.

Lock-plate—Plate to which all the lock is screwed.

Loops—Eyes to receive the bolts that fasten the barrel to the stock.

Mainspring—That spring by which the tumbler is worked with the cock.

Nipple—The iron pillar on which the copper cap of a detonating-gun is placed.

Pipes—Tubes to receive the ramrod.

Rib—Piece of iron which strengthens the barrel, and on which the ramrod rests.

Scroll-guard—An extension from the guard to steady the hand.

Scear—That which catches the tumbler for half or whole cock, and which, being pushed up by the trigger, lets the cock fall.

Scear-spring—The spring which holds the scear in the notches of the tumbler, at half or whole cock.

Side-nail—A screw which fastens on the locks.

Sight—The piece of metal, attached to the end of a gun-barrel, to assist the eye in taking aim at an object.

Spring-cramp—A small instrument for dissecting locks.

Tail—The shoulder of a hammer.

Top-piece—Elevated rib, along which is directed the line of aim.

Trigger-plate—Plate in which the triggers work.

Trigger-springs—Small springs to keep the triggers constantly pressing close to scear.

Tumbler—The moveable centre piece of a lock, which falls with the cock.

Tumbler-screw—The screw which fastens on the cock.

Vent-hole—A small hole at the side of the breeching in detonating-guns, to let out the gas, and lessen the recoil.

Worm—Screw at the end of ramrod.—*Hints to Sportsmen—Thornton—Daniel—Hawker.—Wild Sports.*

GUNPOWDER, *s.* The powder put into guns to be fired.

Gunpowder is composed of very light charcoal, sulphur, and well refined saltpetre. The powder used by sportsmen in shooting game is generally composed of six parts of saltpetre, one of charcoal, and one of sulphur; but these proportions, as well as the introduction of other ingredients, and the sizes of the grains, are undoubtedly varied by the different manufacturers in the composition of the powders of the same denominations, and are always kept profoundly secret.

The materials are put into a wooden trough, where they are ground together, to render the contact of the nitrous and combustible particles intimate and equal throughout the whole mass. The mixture is occasionally sprinkled with water to form an amalgam, which is afterwards granulated, and to prevent the finer particles of the sulphur and the charcoal from flying off, which would necessarily alter the proportion of the composition. The powder-makers employ more or less time in the operation of grinding, in proportion to the quantity and quality of the saltpetre. When they conceive that the ingredients are properly mixed together, they from the paste form these little grains, which, being dried, obtain the name of gunpowder.

There are two general methods of examining gunpowder, one with regard to its *purity*, the other with regard to its *strength*.

Its *purity* is known by laying two or three little heaps near each other upon white paper, and firing one of them. For if this takes fire readily and the smoke rises upright, without leaving any dross or feculent matter behind, and without burning the paper, or firing the other heaps, it is esteemed a sign that the sulphur and nitre were well purified, that the coal was good, and that the ingredients were thoroughly incorporated together; but if the other heaps also take fire at the same time, it is presumed, that either common salt was mixed with the nitre, or that the coal was not well ground, or the whole mass not well beat or mixed together; and if either the nitre or sulphur be not well purified the paper will be black or spotted.

To determine the *strength* of powder, dry it perfectly and ascertain how many sheets of paper it will drive the shot through at the distance of ten or twelve yards. In this trial we should be careful to employ the *same sized shot* in each experiment—the quantity both of the shot and the powder being regulated by exact weight, otherwise we cannot, even in this experiment, arrive to any certainty in comparing the strength of different powders, or of the same powder at different times.

Mr. Daniel, in speaking of gunpowder, gives the following recipe for increasing its strength. We entirely coincide in his opinion that it is quite unnecessary to augment the force of modern gunpowder, and insert the directions rather for the experimentalist than the sportsman.

"The following method of increasing the force of gunpowder one-third in proportion to its original goodness, was discovered by a physician of Fogano, in Tuscany, whose name was Francesco. To every pound of powder add four ounces of quick lime, fresh and well pulverised; let the whole be shaken until the mixture is perfect, and afterwards kept for use in a close stopped vessel. To the chemists is left to decide upon what principle the lime acts in strengthening the powder. The experiment is said to be certain. It is necessary to add, that the powder used in priming must be unmixed with lime. Without artificially augmenting the strength of gunpowder, that made by Messrs. Pigou and Andrews will be found excellent; and it is to be feared, if a gentleman cannot kill with the above, no chemical preparation will much assist his endeavours."

The concluding observations are taken from a very clever and ingenious work, published many years ago, and entitled "An Essay on Shooting."

Powder ought to be kept very dry; every degree of moisture injures it. Good powder, however, does not readily imbibe moisture; and, perhaps, there is no greater proof of the bad quality of powder, than its growing damp quickly when exposed to the air. This readiness to become moist, depends upon the saltpetre employed in the composition not having been freed from the common salt it contains in its crude state, and which, in consequence, has a very strong attraction for watery particles.

Powder may acquire a small degree of dampness, and be freed from it again by drying, without much injury to its quality. But if the moisture is considerable, the saltpetre is dissolved, and the intimate mixture of the several ingredients thereby entirely destroyed. Drying powder with too great a heat also injures it; for there is a degree of heat, which, although not sufficient to fire the powder, will yet dissipate the sulphur, and impair the composition by destroying the texture of the grains. The heat of the sun is, perhaps, the greatest it can with safety be exposed to, and, if properly managed, is sufficient for the purpose; when this cannot be had, the heat of a fire, regulated to the same degree, may be employed; and for this end, a heated pewter plate is perhaps as good as anything, because pewter retains so moderate a heat, that there can be little danger of spoiling the powder by producing the consequences before-mentioned.

It is observable that damp powder produces a remarkable foulness in the fowling-piece after firing, much beyond what arises from an equal quantity of dry powder; and this seems to arise from the diminution of the activity of the fire in the explosion.

Unless the sportsman is *very particular indeed* in the mode of keeping his powder, wo would recommend him always to air it and his flask before he takes the field.

Flasks made of copper or tin are much better for keeping powder in than those made of leather, or than small casks; the necks of these should be small, and well stopped with cork.—*Wild Sports.*

GUNSHOT, *s.* The reach or range of a gun.

GUNSHOT, *a.* Made by the shot of a gun.

GUNSMITH, *s.* A man whose trade is to make guns.

GUNSTICK, *s. obs.* The rammer.

GUNSTOCK, *s.* The wood to which the barrel of a gun is fixed. *Vide* STOCK.

To repair a broken stock.—See then, I first put a little glue between the fractured parts, and then tie them strongly round. Hand me that gimlet. Now we have a hole right through, at right angles with the grasp; —dip that peg in glue, and hand it over to me—so now we have it driven tight in. I let loose the string at one end, and begin to bind the stock with this waxed thread, leaving the glue that has oozed from the sides of the wood to lay hold of the thread—so now it is finished off like a cricket-bat. Let us borrow a small strip of ribband of the hostess, to bind over and prevent our friend's hand from being stuck to the stock. Enough; I will venture to say that the bandage would remain firm much longer than it will be left there; and though the grasp of the gun is a little thicker, it will not much matter, and it is but a makeshift after all.—*Hints to Grown Sportsman.*

GURGITTING, *s.* In falconry, act of suffocation in hawks.

GUST, *s.* A sudden violent burst of wind.

GUT, *s.* The long pipe reaching with many convolutions from the stomach to the vent; the stomach, the receptacle of food.

GUT, *v.* To eviscerate, to draw; to take out the inside.

GYMNASTIC, *a.* Relating to athletic exercises.

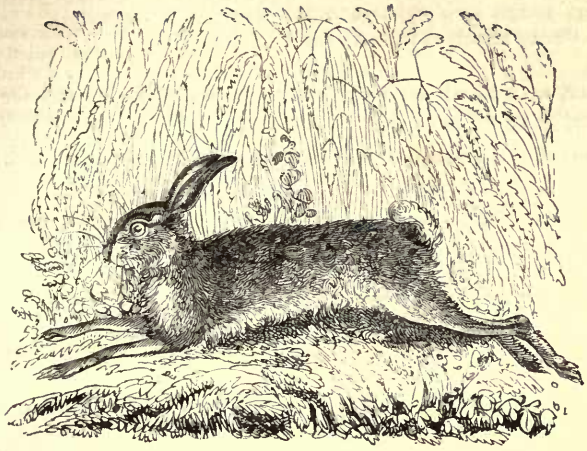
GYRATION, *s.* The act of turning any thing round; the ascent of a hawk.

GYRE, *s.* A circle described by anything going in an orbit.

GWINNIAD, *s.* The name of a fish.

The gwinniad, although a fish, is not immediately within the list of those that are objects of the angler's attention, yet it is noticed as being a native of peculiar parts of this country. It is found, according to Pennant, in one of the lakes of Ireland—Lough Neagh, where it is called the pollen; in Lough Maben, in Scotland, where it is termed the vangis; and the Scotch have a tradition, that it was there first introduced by their beauteous queen, the unhappy Mary Stuart.

They are taken in nets, but never by any bait, keeping on the bottom of the lake, and feeding on small shells, and the leaves of the water gladiole, a plant peculiar to these mountain lakes.—*Daniel.*



THE HARE.

HAAK, *s.* A fish.

HACK, *v.* To turn hackney; to abuse.

HACKLE, *s.* Raw silk, any filmy substance unspun.

To Prepare Hackles.—First, pick and bunch them, and be careful they are the feathers of old cocks, otherwise they will not be worth a farthing when dyed, as they will all curl in on each edge, and shrivel up in the points. Bunch each colour by themselves, and throw them into a basin of hot water. Take them out one by one, and rub soap on them downwards, dipping them occasionally in the water till you see they are clean; dip them in a weak solution of alum water, and then wash them very well in clean water, and they are done.

Every shade of red will come out of the dye, differing in colour, whether olive or cinnamon. For olives, ground richly in turmeric, and throw into the same liquor the size of a hazel nut of best madder. Boil in that a quarter of an hour, and throw in a small bit of copperas, first lifting out your hackles till the copperas is dissolved, and when the liquor boils, throw in your feathers for an instant, and you have fine olives. Black hackles dyed in this way, become a rich green olive, or dooghadoo. For cinnamons ground richly in turmeric, all red hackles; then put in two teaspoonfuls of cochineal, ground or powdered, boil them in that for a quarter of an hour, then put in one teaspoonful of best brazil dust, and boil for a quarter of an hour, and you have fine cinnamons. Any dirty tawneys, or grizzle hackles may be dyed in this, and it will improve them much. There is a sort of reddish cuckoo hackle that may be dyed in turmeric and madder, as in the olive hackle process, but not to have any copperas. There is also a yellowish white with a black vein in the middle, and edged with black. All whites, natural yellows, or yellowish whites for the drakes. There is a scald whitish cuckoo hackle with very little black in it—have nothing to do with them. All those marked as above should be dyed in the following way:—

Take one chip of young fustic, and two or three seedy sprigs of French weed; boil in this till they come to a faint yellow: draw them, if you wish a bunch of that colour, and if not, put in one pinch of turmeric, and one of madder; boil in this for a quarter of an hour, and I think you will have fine hackles

for the drakes. You have no richness from the weed, but when you add the turmeric and madder you have. In every instance except this, I condemn and forbid the dyeing with turmeric and young fustic, as it will ruin every thing that is dyed in it—it gives so bad a colour.

To stain hackles of a fine rich Gold Colour.—Ground strongly in turmeric, then add a tea-spoonful of best madder, boil well for fifteen minutes, and draw them. Add then two spoonfuls more of madder, and boil for the same time, and draw again. Then add three more, and boil as before; and, lastly, add six spoonfuls of madder, and boil for half an hour, and you have four fine shades of gold colours.—*Ancient Recipes.*

HACKNEY, *s.* A hired horse; a hireling; any thing let out for hire; a horse of small value used to ride to cover.

HACKNEY, *v.* To practise in one thing; to accustom to the road.

HADDOCK, *s.* A sea fish of the cod kind.

The haddock, one of the commonest fishes in the London markets, begins to be in roe in the middle of November, and so continues until the end of January; from that time until May they are thin tailed, and much out of season. The grand shoal of haddocks comes periodically on the Yorkshire coasts.

Fishermen assert, that when the sea is rough, haddocks sink down into the ooze and sand at the bottom, and there shelter themselves until the storm subsides; their reason for this assertion is, that in boisterous weather they take none, and those that are caught immediately after a storm, have their backs covered with mud. The bulk of the haddock is seldom known to exceed fourteen pounds; these are uncommon, and extremely coarse, the best for the table weighing from two to three pounds. The black spot beyond the gills, is the mark which superstition interprets to be the impression left by the finger and thumb of St. Peter, when he took the tribute money out of the mouth of a fish of this species, and which has been ever since that miracle continued to the whole race of haddocks.

The haddock taken on the Irish coasts are much superior to what is found in the English markets. Those of seven or eight pounds weight are preferred to smaller fish, being considered finer and firmer.—*Daniel, &c.*

HAFT, *s.* A handle, that part of an instrument that is taken into the hand.

HAGGARD, *a.* Wild, untamed, irreclaimable; lean; rugged, deformed.

HAGGARD, *s.* Any thing wild or irreclaimable; a species of hawk.

HAIL, *s.* Drops of rain frozen in their falling; a provincial name for shot.

HAIR, *s.* One of the common teguments of the body; a single hair; any thing proverbially small; small filaments issuing out of the pores of the skins of animals, and serving for the most part as a covering. The constituent parts of hair are animal matter, oil, silex, sulphur, carbonate of lime, &c.—*Crabbe.*

Hair that is most proper, is that taken from a young, healthy, grey, or white stallion, and which is of a pale transparent water-colour; that from the middle of the tail is the best. The hairs should be sorted singly, and the biggest, roundest, and freest from blemishes, made up into small bundles; the next sized hairs, and all that are sound and good, are to be alike sorted and parcelled out; they are then to be laid in clean spring water for twelve hours; after that, washed well, and dried either with bran, or by hanging them in a room where the heat of a fire or sun comes (they must not be placed too near a fire); when dry, they should be again sorted, and the best done up five or six score together, with their root-ends quite equal, and tied round with thread at both ends and in the middle, and should be kept in a dry place. Hair must not touch oil, which will make it hollow and soon decay; it ought to be kept in parchment. Dipping it in water every two or three months, and afterwards slowly drying it, will preserve it for years.

* * *

Sorrel, chestnut, or brown-coloured hairs are best for ground angling, especially in muddy waters, as they nearly resemble the

colour of the water; white, grey, or darkish white hair, is for clear streams. Some use a pale watery green for weedy rivers in summer. Black will only do for rivers immediately flowing from mosses.

* * *

To make the hair grow in horses.— When the surfeit or sharp humour prevents the wound healing, take a piece of fresh butter and boil it in a spoon, to which, add a common charge of gunpowder; mix well, and anoint the part at night; wash off the ointment with vinegar in the morning; repeat this for two or three times.

Haircloth, *s.* Stuff made of hair; it is useful in cleansing a horse's skin of impurities.

It is also assistant to health, that confined dogs should have their hides rubbed every day with a hair cloth, or a wisp of straw; this dislodges the furfuraceous matter of the skin, and prevents its adhesion, which forms the first step to mange: it also assists general circulation, and stands in the stead of exercise. This practice of rubbing would prove an excellent substitute for washing in many cases, particularly where water proves injurious, which it sometimes does to delicate dogs.— *Blaine.*

Hale, *a.* Healthy, sound, hearty.

Half-bred, *s.* Any horse not thorough bred; half-bred, imperfect.

Halibut, *s.* A sort of fish.

Halloo, *interj.* A word of encouragement when dogs are let loose on their game.

Halloo, *v.* To cry as after dogs; to encourage with shouts; to chase with shouts; to call or shout to.

Halm, *s.* Straw.

Halt, *v.* To limp, to be lame; to stop in a march.

Halter, *s.* A rope to hang malefactors; a cord; a manger rope.

Halter, *v.* To bind with a cord; to catch in a noose.

Hammer, *s.* The instrument, consisting of a long handle and heavy head, with which any thing is forced or driven; a part of a gun cock.

If a hammer is too hard, the flint will make scarcely any impression on it; and if too soft, it soon becomes dented, like lead; but when of good temper, the impression is moderate, and the sparks, before they are extinquished, pause in the pan, and occasion a whizzing noise.—*Hawker.*

Hammer, *v.* To beat with a hammer; to forge or form with a hammer.

Hammock, *s.* A swinging bed, generally used in vessels; a hempen cloth bag to sleep on, six feet long and three feet wide.

Hamstring, *s.* The tendon of the ham.

Hamstring, *v.* To lame by cutting the tendon of the ham.

Hand, *s.* That member of the body which reaches from the wrist to the fingers' end; measure of four inches; cards held at a game; pressure of the bridle.

Hander, *s.* Conveyer in succession; the person who manages the cock when fighting.

Handful, *s.* As much as the hand can gripe or contain; a small quantity.

Handgallop, *s.* A slow easy gallop.

Handgun, *s. obs.* A gun wielded by the hand.

Handle, *s.* That part of any thing by which it is held in the hand.

Handy, *a.* Ready, dexterous, skilful, convenient.

Hank, *s.* A skein of thread; a skein of gut containing 100 threads.

Harbour, *s.* A port or haven for shipping; an asylum; a shelter; the lair or haunt of a dog.

Harbour, *v.* To entertain, to shelter, to secure; to trace a deer to cover.

Hardy, *a.* Brave, stout, daring; strong, hard, firm.

Hare, *s.* A small quadruped, remarkable for timidity, vigilance, and fecundity.

The generic character of the hare consists in its having two front teeth, both above and below; and the upper pair duplicate, two small interior ones standing behind the others: the forefeet with five, and the hinder with four toes.

These animals live entirely on vegetable food, and are all remarkably timid. They run by a kind of a leaping-pace, and in walking they use their hind feet as far as the heel. Their tails are either very short (called in England scuts), or else they are entirely without.

* * *

The Common Hare.—This little animal is found throughout Europe, and indeed in most of the northern parts of the world. Being destitute of weapons of defence, it is endowed by Providence with the passion of fear. Its timidity is known to every one: it is attentive to every alarm, and is, therefore, furnished with ears very long and tubular, which catch the most remote sounds. The eyes are so prominent, as to enable the animal to see both before and behind.

The hare feeds in the evenings, and sleeps in his form during the day; and as he generally lies on the ground, he has the feet protected both above and below, with a thick covering of hair. In a moonlight evening, many of them may frequently be seen sporting together, leaping about and pursuing each other: but the least noise alarms them, and they then scamper off, each in a different direction. Their pace is a kind of gallop, or quick succession of leaps; and they are extremely swift, particularly in ascending higher grounds, to which, when pursued, they generally have recourse, here their large and strong hind legs are of singular use to them. In northern regions, where, on descent of the winter's snow, they would, were their summer fur to remain, be rendered particularly conspicuous to animals of prey, they change in the autumn their yellow grey dress, for one perfectly white; and are thus enabled, in a great measure, to elude their enemies.

In more temperate regions, they choose in winter a form exposed to the south, to obtain all the possible warmth of that season: and in summer, when they are desirous of shunning the hot rays of the sun, they change this for one with a northerly aspect: but in both cases they have the instinct of generally fixing upon a place where the immediately surrounding objects are nearly the colour of their own bodies.

In one hare that a gentleman watched, as soon as the dogs were heard, though at the distance of nearly a mile, she rose from her form, swam across a rivulet, then lay down among the bushes on the other side, and by this means evaded the scent of the hounds. When a hare has been chased for a considerable length of time, she will sometimes push another from its seat, and lie down there herself. When hard pressed, she will mingle with a flock of sheep, run up an old wall, and conceal herself among the grass on the top of it, or cross a river several times at small distances. She never runs in a line directly forward, but constantly doubles about, which frequently throws the dogs out of the scent; and she generally goes against the wind. It is extremely remarkable that hares, however frequently pursued by the dogs, seldom leave the place where they were brought forth, or that in which they usually sit; and it is a very common thing to find them after a long and severe chase, in the same place the following day.

The females have not so much strength and agility as the males; they are, consequently, more timid, and never suffer the dogs to approach them so near, before they rise as the males. They are likewise said to practise more arts, and double more frequently.

This animal is gentle, and susceptible even of education. He does not often, however, though he exhibits some degree of attachment to his master, become altogether domestic: for although taken very young, brought up in the house, and accustomed to kindness and attention, no sooner is he arrived at a certain age, than he generally seizes the first opportunity of recovering his liberty, and flying to the fields.

Whilst Dr. Townson was at Gottingen, he had a young hare brought to him, which he took so much pains with, as to render it more familiar than these animals commonly are. In the evenings it soon became so frolicsome, as to run and jump about his sofa and bed; sometimes in its play it would leap upon, and pat him with his forefeet, or whilst he was reading,

even knock the book out of his hand. But whenever a stranger entered the room, the little animal always exhibited considerable alarm.

Mr. Borlase saw a hare that was so familiar as to feed from the hand, lie under a chair in a common sitting room, and appear, in every other respect, as easy and comfortable in its situation as a lap-dog. It now and then went out into the garden, but after regaling itself always returned to the house as its proper habitation. Its usual companions were a greyhound and a spaniel, both so fond of harehunting, that they often went out together, without any person accompanying them. With these two dogs this tame hare spent its evenings: they always slept on the same hearth, and very frequently would rest itself upon them.

Hares are very subject to fleas. Linnæus tells us, that cloth made of their fur will attract these insects, and preserve the wearer from their troublesome attacks. In India the hare is hunted for sport, not only with dogs, but with hawks, and some species of the cat genus. The flesh, though in esteem among the Romans, was forbidden by the Druids, and by the Britons of the early centuries. It is now, though very black, and dry, and devoid of fat, much esteemed by the Europeans, on account of its peculiar flavour.

The female goes with young about a month; she generally produces three or four at a litter, and this about four times in a year. The eyes of the young ones are open at birth: the dam suckles them about twenty days, after which they leave her, and procure their own food. They make forms at a little distance from each other, and never go far from the place where they were brought forth. The hare lives about eight years.

* * *

Some believe that hares propagate but once a year, but, in the author's opinion, they breed from February to the end of harvest. The doe chooses some thick dry brake, high grass, clover, or standing corn, to kindle in; her paps come forwarder under her belly, than those of almost any quadruped; she does not long suckle her young; if she did, and had many, the udder would be drawn too big, and be inconvenient whilst the hare was running; she brings forth differently from the rabbit, her offspring being completely formed and quick-sighted the instant they are dropped. Among naturalists it is a received notion that the hare, especially the buck, seldom lives beyond seven years, and that when either is killed, another succeeds to occupy its place; whence is derived the proverb—"The more hares you kill, the more you will have to hunt;" for when the buck and doe live undisturbed together a little time, they suffer no stranger to reside within their limits. It is also a well experienced truth, that some places are remarkable for being seldom without hares, and others (although as likely, in all appearance, to harbour them) rarely with any. Whether it is any particular excellence in the feed, in the situation for forming advantageously, for warmth, hearing, or seeing, that induces them to prefer certain spots to others, or that on the death of a buck or doe, another succeeds, and they possess their usual circle, cannot be ascertained, but the fact is perfectly established.

* * *

The first ring a hare takes is generally the foundation of the ensuing pastime, all the doubles she afterwards makes are in a great measure like the first; a hare will go over great part of trailed land, and visit her works of the preceding night and morning; sometimes a buck will take endways over fresh ground, without offering to return; the doe usually runs in a circle, unless with young, or having recently kindled; at such times she often runs forward, and scarcely ever escapes with life, being naturally unfit for fatigue: however, both sexes greatly regulate their conduct according to the season and weather. After a rainy night, in a woody country, neither buck nor doe will keep the cover, owing to the drops of wet hanging on the spray; they therefore run the highways or stony lanes, for as the scent naturally lies strong, they hold the roads which take the least; not that a hare judges upon what soil the scent lies weakest; it is her ears that chiefly direct her, for the hounds being oftener at fault on the hard paths than the turf, she finds herself not so closely pressed, and is not so much alarmed with the continual cry of the dogs at her heels. The louder the cry, the more she is terrified, and flies the swifter; the certain effect of which is, a heart broken sooner than with a pack equal in number and goodness, but who spend their tongues less free. The same principle directs the hare to run to the covers in autumn; when the ground is dry, and the wind cold at north or east; she then keeps the paths that are covered with leaves, which are so continually falling and blowing about, that the best hounds can carry no scent; her alarms are consequently short, and she rests contented where she is least disturbed.

* * *

When a hare rises out of form, if she erects her ears, and at first runs slowly, with her scut cast over her back, it is surely old and crafty. When a hare is hunted to her form, along the hard highways, and feeds far away from cover, and that her doublings and crossings are wide and large, it is a buck; for the does generally keep close to the side of some cover, and, when going to feed in the cornfields, seldom cross over the furrows, but

follow the track of them: when hunted they turn frequently, use many stratagems, and rarely leave the country round their seat, whilst the buck, after two or three turns about his form, runs straight forward four or five miles, and then probably squats in some place where he has before preserved himself. A buck or jack hare may also be known by his head being shorter, his ears more grey, his shoulders redder, and the body being smaller than the doe, and, at his first starting, by the whiteness of his hinder parts.

They who make a business of hare-finding (and a very advantageous one it is, in some counties), are enabled to find them in any weather, by observing the direction of the wind. People frequently do not find hares, from not knowing them in their forms. A gentleman coursing with his friends, was shown a hare that was found sitting: "Is that a hare?" he cried; "then, by Jove, I found two this morning as we rode along."

* * *

According to the season of the year, the hare is to be looked for: if it be spring, upon fallows or green corn; during the autumn, in stubbles or turnips; in winter they will seat themselves near houses, in brambles and tufts of thorns. * * *

Hares will certainly, when hard pressed, go to vault; that is, take the ground like a rabbit. * * *

Fecundity of Hares.—A male and female hare were put together by Lord Ribblesdale, for a year, when the offspring amounted to sixty-eight. A couple of rabbits, inclosed for the same period, produced about three hundred. * * *

Feet of Hares.—Tender feet in dogs are owing to the softness of that fleshy substance called the ball of the foot; but nature has to the hare been singularly liberal in this part by supplying her with such feet as are not subject to, and indeed scarcely susceptible of hurt, so as to incommode her in running. The balls of her feet, instead of hard flesh, are covered with strong coarse fur, suited so well for the purpose, that she never treads easier or to more advantage than on the hardest beaten track, or rugged, stony road; the very surface which cripples a dog she glides over with pleasure. In a frost she has an evident superiority to most creatures; the horse does not at that season take his gallops for fear of foundering; the greyhound or hound would in running start all their claws, and tear their soles to pieces, whilst the hare treads as soft as if she went on wool.

Hare Warren.—The warren should be paled, and the meuses made of brick; but to any person making a warren, Mr. Beckford recommends examining the traps, boxes, and stoppers, all of which have peculiarities not easy to be described. His town warren is in a wood of near thirty acres, and is cut into many walks; a smaller warren, which would perhaps answer as well, should have only one walk, and that round the outside of it. No dog must ever be allowed to enter it, and traps for stoats and polecats should be constantly set. Parsley sown in it will induce the hares to keep at home. When hares at the end of a season become shy of the traps from having been often caught, it will be necessary to drive them in with spaniels. The warren hares will be found very thick round the warren, for they will be unwilling to leave it, and when disturbed by dogs will immediately go in. The number of hares which a warren will supply is hardly to be conceived; but Mr. B. prefers a warren in the midst of an open country (which might be stopped close on hunting days), to the catching hares in traps, and then turning them down. A warren so situated would supply the whole country with hares, which, after one turn round it, would most probably run straight on end.

* * *

The Varying Hare.—This species has a very soft fur, which in summer is grey, with a slight mixture of tawny; the tail is always white. The ears are shorter, and the legs more slender than those of the common hare, and the feet more closely and warmly furred. In size this animal is somewhat smaller.

Besides other cold parts of Europe, the varying hare is found on the tops of the highest Scotch hills, never descending to the plains. It never mixes with the last species, though common in the same neighbourhood. It does not run fast, and when alarmed takes shelter in clefts of the rocks.

In September it begins to change its grey coat and resume its white winter dress, in which only the tips and edges of the ears and the soles of the feet are black. In the month of April it again becomes grey. It is somewhat singular that although this animal be brought into a house, and even kept in stoved apartments, yet it still changes its colour at the same period that it does among its native mountains.

* * *

Hounds for hunting box hares should not be too fleet, and they are to be hunted like a pack of fox hounds, as a trap hare runs very much in the same manner, and will even top the hedges; Mr. B. concludes his remarks upon the running of trap hares, with the method recommended by a gentleman to insure them to run straight, which was tying a piece of riband to their ears.

The hounds mostly used for hare hunting, are the deep-tongued, thick-lipped, broad and long hung southern hounds.

The fleet, sharp-nosed dog, ears narrow,

deep-chested, with thin shoulders, showing a quarter cross of the fox hound.

The rough wire-haired hound, thick quartered, well hung, and not too much flesh on his shoulders.

The rough or smooth beagle.—*Daniel*—*Buffon, &c. &c.*

HARELIP, *s.* A fissure in the upper lip, with want of substance.

HARNESS, *s.* The leather gear, &c., used to attach horses to carriages.

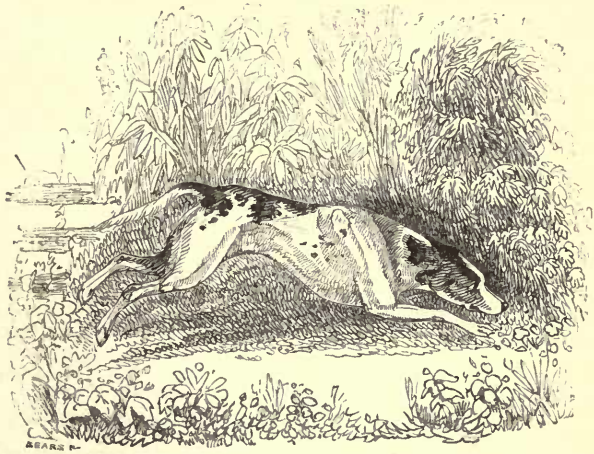
HARNESS, *v.* To fix horses in their traces.

HARPOON, *s.* A bearded dart with a line fastened to the handle, with which whales are struck and caught.

HARQUEBUSS, *s. obs. Fr.* Arquebuse. A handgun; a musquet.

HARRIER, HEN HARRIER, (*Circus Pygargus*, FLEMING), *s.* A small sized hawk. It is generally believed by ornithologists to be the same species as the Ringtail.

HARRIER, *s.* A dog for hunting hares.



This dog is now almost universally used in Great Britain for hare hunting. He was originally generated in a double cross, between the small beagle, the southern hound, and the dwarf fox.

There are, however, various harriers produced by crosses introduced in breeding, dictated by knowledge and experience, and depending on the kind of country they hunt in, and the wish or fancy of the owner of the pack; all of which are a great alteration in the blood.

The harrier pursues the hare with great eagerness and speed, allowing her but little time to breathe or double. The keenest sportsmen often find it difficult to keep up with this dog, and with a strong hare it is rather fatiguing work. There is a great deal of melody and cheerful harmony in the voices of harriers during the chase.

Mr. Beckford, who was justly esteemed one of the best judges of dogs in Britain, endeavoured, as far as possible, to breed his harriers with much bone and strength within a small compass, and, at the same time, of a handsome make. These respective qualities he obtained; and his hounds ran remarkably well together, went fast, had all the alacrity that could be desired, and would hunt the coldest scent.

Although the harrier is the best adapted for hare hunting, yet there are situations where he is too weak, being ill-suited for swampy and marshy lands, such as those of Lancashire and Lincolnshire, and many other places. The large low southern hound seems best calculated for such localities. Harriers which are of a larger description, and crossed for the purpose of speed, are only superior in open countries, where, for want of covert, the hare will run five or six miles right out without a single turn. In such cases the pleasure of the chase may be compared to those of fox-hunting.

Harriers, in Mr. Beckford's judgment, to be good, must be kept to their proper game. Hounds cannot be perfect unless used to one scent, and one style of hunting; to run fox with them teaches them to skirt, and is of great disservice to them. The high scent which a fox leaves, the straightness of his course, the eagerness of the pursuit, and the hallooing that usually accompanies it, all contribute to spoil a harrier.—*Brown—Daniel.*

HARRY, *v.* In Scotland, signifies to rob, plunder, or oppress; destruction of game by birds of prey.

HART, *s.* A he-deer of the large kind; the male of the roe.

HARTSHORN, *s.* A volatile alkali, originally drawn from the horn of a stag, called by modern chemists subcarbonate of ammonia.

HASLET, or HARSLET, *s.* The heart, liver, and lights of a hog, with the windpipe and part of the throat to it.

HATCH, *v.* To produce young from eggs; to quicken the eggs by incubation.

HATCH, *s.* A brood excluded from the egg; the act of exclusion from the egg; the half-door; in the plural, the doors or openings by which they descend from one deck or floor of a ship to another.

HATTOCK, *s.* A shock of corn. *Provincial.*

HAUL, *v.* To pull, to draw, to drag by violence, to draw a net.

HAUL, *s* Pull, violence in dragging; a draught of fishes.

HAUM, *s.* Straw.

HAUNCH, *s.* The thigh, the hind hip; the hind part of a deer.

HAUNT, *v.* To frequent, to be much about any place.

HAUNT, *s.* Place in which game feed and are found.

HAW, *s.* The berry and seed of the hawthorn; a hedge; an excrescence in the eye; a small piece of ground adjoining to a house.

HAWTHORN, *s.* The thorn that bears haws; the white thorn.

HAWTHORN, *a.* Belonging to the white thorn; consisting of white thorn.

HAWK, *s.* A bird of prey, used much anciently in sport to catch other birds.

Hawks (*Accipitrina*, VIGORS) are birds of prey, belonging to the falcon family (*Falconidæ*, LEACH), and characterised by the wings being short, and, when closed, scarcely reaching to the end of the tail; the first quill feather very short, the third nearly equal to the fourth, which is the longest in the wing; shanks plaited, long, and slender; middle toe greatly exceeding the two lateral ones in length; claws much hooked, and very sharp; flight rapid and direct. They pounce upon their prey on the wing, and are so bold as to attack much larger birds than themselves. * * *

Breaking of Hawks.—When the hawk is placed upon the fist with his hood on, he will at first *bait*, (flutter off,) when he is to be replaced gently by the hand; but he will very soon learn to sit still. He must be carried on the fist during the greater part of the day frequently, and stroked with a feather on his back and legs.

When he is to be fed, the hood must be taken off. At first, this is best done at night, with a candle so placed as to give no more light than is absolutely necessary; but in two or three days this precaution will not be required, and he may be unhooded, and fed by daylight.

He must now be brought, by degrees, to stand quiet when the hood is to be put on.

The brail is used for this purpose. This is a thong of soft leather, with a slit running longitudinally along the middle, of such a length as to admit the pinion joint.

When the pinion joint has been introduced into the slit, the lower end of the thong is brought backwards under the wing, and tied to the other end above it.

The wing is thus confined, and in such a way as to remove it but little from its natural position, and so that it can receive no injury.

Another very effectual way to make a hawk stand quiet is, by causing water to stream upon him, from a wisp of hay or straw, until he is thoroughly drenched. This should always be done in the morning, and he should be carried on the fist until he is dry, with his wing *brailed*, be stroked with a feather, and hooded and unhooded very frequently.

When he has become a little accustomed to the hood, neither the brail nor the drenching will be necessary, but he must be carried almost all day upon the fist. The hood is to be occasionally taken off, and he may then be allowed for a short time to pull upon a stump or pinion from which he can get but little meat.

A few mouthfuls should always be given to him the moment the hood is put on.

Hawks, when hooded, are always quiet. In the field the hood prevents them from *baiting* when birds rise, and, at other times, from being alarmed at any thing that may approach them.

It may, perhaps, appear paradoxical to assert, that hawks, by being kept hooded, are brought nearer to their natural habits, but this is undoubtedly the case, for by this treatment they are induced to remain at rest when they are not either feeding, or in pursuit of game; and such are their habits in a wild state, when left undisturbed.

When the hawk is become tolerably tame, he may be unhooded, and, after having eaten a few mouthfuls, be placed on the block, and enticed to come from thence to the fist when held near him. He will soon learn to fly to it when it is presented to him at the distance of several feet, the fist being, of course, always well garnished with meat.

When he has been practised in this manner for a few days, if he be unhooded on the fist, and a small piece of meat be thrown on the ground, to the distance of two or three feet, he will fly down to it, and having eaten it, fly back to the fist, enticed, as usual, by the offer of food.

* * *

The sport of hawking is generally placed at the head of those amusements that can only be practised in the country, and probably it obtained this precedency from its being a pastime so generally followed by the nobility, not in this country only, but also upon the continent. Persons of high rank rarely appeared without their dogs and their hawks; the latter they carried with them when they journeyed from one country to another, and sometimes even when they went to battle, and would not part with them to procure their own liberty when taken prisoners. Sometimes they formed part of the train of an ecclesiastic.

These birds were considered as ensigns of nobility: and no action could be reckoned more dishonourable to a man of rank than to give up his hawk.

I cannot trace the origin of hawking to an earlier period than the middle of the fourth century. Julius Firmicus, who lived about that time, is the first Latin author that speaks of falconers, and the art of teaching one species of birds to fly after and catch others.

The grand fauconnier of France was an officer of great eminence; his annual salary was four thousand florins; he was attended by fifty gentlemen, and fifty assistant falconers; he was allowed to keep three hundred hawks; he licensed every vender of hawks in France, and received a tax upon every bird sold in that kingdom, and even within the verge of the court; and the king never rode out upon any occasion of consequence without this officer attending him.

Edward III., according to Froissart, had with him in his army when he invaded France, thirty falconers on horseback, who had charge of his hawks; and every day he either hunted, or went to the river for the purpose of hawking, as his fancy inclined him.

We may also here notice, that the ladies not only accompanied the gentlemen in pursuit of this diversion, but often practised it by themselves; and, if we may believe a contemporary writer, in the thirteenth century, they even excelled the men in knowledge and exercise of the art of falconry, which reason, he very ungallantly produces, in proof that the pastime was frivolous and effeminate. Hawking was forbidden to the clergy by the canons of the church; but the prohibition was by no means sufficient to restrain them from the pursuit of this favourite and fashionable amusement. On which account, as well as for hunting, they were severely lashed by the poets and moralists; and, indeed, the one was rarely spoken of without the other being included; for those who delighted in hawking were generally proficients in hunting also.

When the hawk was not flying at her game, she was usually hood-winked, with a cap or hood provided for that purpose, and fitted to her head; and this hood was worn abroad as well as at home. All hawks taken upon "the fist," the term used for carrying them upon the hand, had straps of leather, called jesses, put upon their legs. The jesses were made sufficiently long for the knots to appear between the middle and the little fingers of the hand that held them, so that the lunes, or small thongs of leather, might be fastened to them with two tyrrits, or rings; and the lunes were loosely wound round the little finger. It appears that sometimes the jesses

were of silk. Lastly, their legs were adorned with bells, fastened with rings of leather, each leg having one; and the leathers, to which the bells were attached, were denominated bewits; and to the bewits was added the creance, or long thread, by which the bird in tutoring, was drawn back, after she had been permitted to fly; and this was called the reclaiming of the hawk. The bewits, we are informed, were useful to keep the hawk from "winding when she bated," that is, when she fluttered her wings to fly after her game.

Respecting the bells, it is particularly recommended that they should not be too heavy, to impede the flight of the bird; and that they should be of equal weight, sonorous, shrill, and musical; not both of one sound, but the one a semitone below the other; they ought not to be broken, especially in the sounding part, because, in that case, the sound emitted would be dull and unpleasing. "There is, says the book of Saint Alban's, great choice of sparrow-hawk bells, and they are cheap enough; but for goshawk bells, those made at Milan, are called the best; and, indeed, they are excellent; for they are commonly sounded with silver, and charged for accordingly. But we have good bells brought from Dordreght (Dort), which are well paired, and produce a very shrill, but pleasant sound."

* * *

The person who carried the hawk was provided with gloves for that purpose, to prevent their talons from hurting his hand. In the inventories of apparel belonging to King Henry VIII. such articles frequently occur; at Hampton Court, in the jewel house, were seven hawkes' gloves embroidered.—*Montagu—Sebright—Strutt.*

HAY, *s.* Grass dried to fodder cattle in winter.

Much in a horse's condition depends on the quality of his hay; good hay is easily chosen, and the smell and colour afford a test of its quality not to be mistaken.

HAZARD, *s.* Chance, accident; chance of danger; a game at dice.

Any number of persons may play hazard. The person who takes the box and dice, throws a main, that is to say, a chance for the company, which must be above four, and not exceed nine, otherwise it is no main, consequently he must keep throwing till he brings five, six, seven, eight, or nine; this done, he must throw his own chance, which may be any above three, and not exceeding ten: if he throw two aces or trois-ace (commonly called crabs), he loses his stakes, let the company's chance, called the main, be what it will. If the main should be seven, and seven or eleven be thrown immediately after, it is what is called a nick, and the caster (the present player) wins out his stakes: also, if eight be the main, and eight or twelve thrown immediately after, it is also called a nick, and the caster wins his stakes. The caster throwing any other number for the main, such as is admitted, and bringing the same number directly afterwards, that is likewise termed a nick, and he then also wins whatever stakes he has made.

Every three successive mains the caster wins, he is to pay half a guinea to the box or furnisher of the dice.

The meaning of a stake or bet at this game differs somewhat from the other. If a person choose to lay a sum of money with the thrower or caster, he must put his cash upon the table, within a circle which is described for that purpose; when he has done this, if the caster agree to it, he knocks the box upon the table at the person's money with whom he intends to bet, or particularly mentions at whose money he throws, which is sufficient, and he is obliged to answer whatever sum is down, unless the staker calls to cover; in that case the caster is obliged to stake also, otherwise the bets would be void. It is optional in the person who bets with the thrower, to bar any throw which the caster may be going to cast, provided neither of the dice be seen; if one die should be discovered, the caster must throw the other to it, unless the throw is barred in proper time.

The common odds, which are absolutely necessary to be understood, before any person attempts to play or bet at this game, are as follow: if seven be thrown for the main, and four the chance, it is 2 to 1 against the person who throws; if six to four be thrown, 5 to 3; if five to four, 4 to 3; seven to nine, 3 to 2; seven to six, 3 to 2, barring the two trois; with the two trois, only six to five; seven to five, 3 to 2; six to five, an even bet, barring the doublets or the two trois; with the trois, 5 to 4; eight to five, an even bet, barring the two fours; five to four with the two fours; nine to five, even; nine to four, is 4 to 3; the nick of seven is 7 to 2, but often laid but 10 to 3; and five to one you do not nick six or eight.

To illustrate these calculations still more clearly, the following table will be serviceable:—

TABLE OF THE ODDS.

7 to 4 is 2 to 1.	against the caster.
6 .. 4 .. 5 .. 3.	
5 .. 4 .. 4 .. 3.	
7 .. 9 .. 3 .. 2.	

7 to 6	3 to 2, barring the two trois.	against the caster.
	6 .. 5, with the two trois.	
7 .. 5	2.	
6 .. 5	even, barring the two trois.	
	5 .. 4 with the two trois.	
8 .. 5	even, barring the two fours.	
	5 .. 4 with the two fours.	
9 .. 5	even.	
9 .. 4 .. 3		

The nick of seven is 7 to 2, often laid 10 to 3.

The nick of six and eight is 5 to 1.

It is necessary to be perfectly master of these odds, in order to play the prudent game, and to make use of them by way of insuring bets in what is called hedging, in case the chance happens to be unlikely; for, by taking the odds a ready calculator secures himself, and often stands part of his bet to a certainty. For example, if seven be the main, and four the chance, and he should have 5*l.* depending on the main, by taking 6*l.* to 3*l.* he must either win 2*l.* or 1*l.*; and on the contrary, if he should not like his chance, by laying the odds against himself, he must save in proportion to the bet he has made.—*Hoyle.*

Hazard, *v.* To expose to chance.

Haze, *s.* Fog, mist.

Hazel, *s.* A nut-tree.

Hazel, *a.* Light brown, of the colour of hazel.

Head, *s.* The part of the animal that contains the brain or the organ of sensation and thought; chief, principal person, one to whom the rest are subordinate; state of a deer's horns, by which his age is known; the top of anything bigger than the rest; the forepart of anything, as of a ship; that which rises on the top of liquors; upper part of a bed; source of a stream.

The head of the horse is a very important part, considered with a view to the beauty of the animal; and in no part is an improvement in the breed so soon detected as in this. Can any thing be conceived more dissimilar than the small inexpressive features attached to the enormous head of a cart-horse, compared with the bold striking lines which grace that of the blood-horse? The head, in the improved breeds, is small and angular, the eyes prominent, the ears spirited, small, and pointed; the forehead wide, straight, and sometimes slightly curved inwards at the lower part: in them the facial angle is about 25°, whereas, in the heavy breed, it is more generally 23°: its junction with the neck, also, is less easy and elegant than in the improved kind.—*Blaine.*

Head, *v.* To lead; to direct; to behead; to kill by taking away the head; to lop trees at the top; to get before a deer or fox, to make him take another course.

Headland, *s.* Promontory, cape; ground under hedges.

Headstall, *s.* Part of the bridle that covers the head.

Headstrong, *a.* Unrestrained; violent, ungovernable.

Heal, *v.* To cure; to restore from sickness or wounds.

Healing, *a.* Mild, mollifying; assuasive.

Health, *s.* Freedom from bodily pain or sickness; strength.

Healthy, *a.* In health, free from sickness; in good condition.

Hearing, *s.* The sense by which sounds are perceived; reach of the ear.

Heart, *s.* The muscle which by its contraction and dilatation propels the blood through the course of circulation, and is therefore considered as the source of vital motion. It is situated in the thorax, and divided externally into the base, the superior and inferior surface, and the anterior and posterior margin. Internally it comprises two ventricles called the right and left.

HEARTLESS, *a.* Without courage, spiritless, out of condition.

HEARTY, *a.* Sincere, warm; in full health; vigorous, strong.

HEAT, *s.* The sensation caused by the approach or touch of fire; hot weather; state of any body under the action of fire; a term in racing. *In gun-making* three degrees of heat are employed; blood-red heat, the lowest flame; white heat, the second; and sparkling or welding heat, the most intense.

HEATH, *s.* A plant; a place overgrown with heath.

HEATHCOCK, *s.* A large fowl that frequents heaths. *Vide* GROUSE.

HEATHPEAS, *s.* A species of bitter vetch.

HEDGE, *s.* A fence made round grounds with prickly bushes.

HEDGE, *v.* To enclose with a hedge; to encircle; to shut up within an enclosure. In betting, hedging means to bet upon and against the same event.

HEDGEHOG, *s.* An animal set with prickles like thorns in a hedge.

Hedgehogs abound in my gardens and fields. The manner in which they eat the roots of the plantain in my grass walk is very curious: with their upper mandible, which is much longer than their lower, they bore under the plant, and so eat the root off upwards, leaving the tuft of leaves untouched. In this respect they are serviceable, as they destroy a very troublesome weed; but they deface the walks in some measure by digging little round holes. It appears, by the dung that they drop upon the turf, that beetles are no inconsiderable part of their food. In June last I procured a litter of four or five young hedgehogs, which appeared to be about five or six days old; they, I find, like puppies, are born blind, and could not see when they came to my hands. No doubt their spines are soft and flexible at the time of their birth, or else the poor dam would have but a bad time of it in the critical moment of parturition: but it is plain that they soon harden; for these little pigs had such stiff prickles on their backs and sides as would easily have fetched blood, had they not been handled with caution. Their spines are quite white at this age; and they have little hanging ears, which I do not remember to be discernible in the old ones. They can, in part, at this age draw their skin down over their faces; but are not able to contract them-

selves into a ball, as they do, for the sake of defence, when full grown. The reason, I suppose, is, because the curious muscle that enables the creature to roll itself up into a ball has not then arrived at its full tone and firmness. Hedgehogs make a deep and warm hybernaculum with leaves and moss, in which they conceal themselves for the winter: but I never could find that they stored in any winter provision, as some quadrupeds certainly do.

* * *

Jesse says, "I had also a tame hedge-hog, which nestled before the fire, on the stomach of an old lazy terrier dog, who was much attached to it, and the best understanding existed between them."

* * *

Sagacity of the Hedgehog.—During the summer of 1818, as Mr. Lane, gamekeeper to the Earl of Galloway, was passing by the wood of Glascaden, near Garlieston, in Scotland, he fell in with a hedgehog, crossing the road at a small distance before him, carrying on its back six pheasant's eggs, which upon examination he found it had pilfered from a pheasant's nest hard by. The ingenuity of the creature was very conspicuous, as several of the remaining eggs were holed, which must have been done by it, when in the act of rolling itself over the nest, in order to make as many adhere to its prickles as possible. After watching the motions of the urchin for a short time longer, Mr. Lane saw it deliberately crawl into a furze bush, where its nest was, and where the shells of several eggs were strewed around, which had at some former period been conveyed thither in the same manner.—*White's Selborne—Jesse.*

Hedgerow, *s.* The series of trees or bushes planted for enclosures.

Hedgesparrow, or Chanter, (*Accentor Modularis*, Cuvier), *s.* A sparrow that lives in bushes.

This well known species, commonly called hedge sparrow, needs little description. The length is five inches and three quarters; weight near six drams. Bill dusky; irides light hazel; head and neck brown, mixed with ash-colour; back and wing coverts darker brown, edged with rufous brown; throat and breast dull ash-colour; belly dirty white; sides and vent tawny brown. The female has less ash-colour about the head and breast.

The hedge sparrow is found in all parts of England; has a pleasing song, which it begins with the new year, if the weather is mild; breeds early, making a nest in March, composed of green moss and wool, and lined with hair, which is placed in some low evergreen shrub, thick brush, or cut hedge; frequently builds in faggot piles. The eggs are four or five in number, blue; their weight about twenty-eight grains.

This bird is one of the few of the warbler tribe that remains with us the whole year. The food is insects and worms; but like the redbreast, it will, in defect of these, pick up crumbs of bread; and seems to prefer situations near the habitation of man.—*Montagu.*

Heel, *s.* The part of the foot that protuberates behind.

Heifer, *s.* A young cow.

Heeler, *s.* A cock that strikes well with his heels.

Hemorrhage, *s.* A violent flux of blood.

Hen, *s.* The female of a house cock; the female of any bird.

Henroost, *s.* The place where the poultry rest.

Herb, *s.* Herbs are those plants whose stalks are soft, and have nothing woody in them, as grass and hemlock.

Herbaceous, *a.* Belonging to herbs; feeding on vegetables.

Herbage, *s.* Herbs collectively; grass, pasture.

Herd, *s.* A number of beasts together; it anciently signified a keeper of cattle, as goat-herd.

Herd, *v.* To run in herds or companies; to associate.

Herdsman, *s.* One employed in tending herds.

Hermaphrodite, *s.* An animal uniting two sexes.

Hernia, *s.* Any kind of rupture.

HERON, COMMON HERON, HERONSEWGH, or HERONSHAW, (*Ardea Major*, LINN.; *Le Heron huppé*, BUFF.) *s.* A bird that feeds on fish.

Although the heron is of a long, lank, awkward shape, yet its plumage gives it, on the whole, an agreeable appearance; but when stripped of its feathers, it looks as if it had been starved to death. It seldom weighs more than between three and four pounds, notwithstanding it measures about three feet in length, and in the breadth of its wings, from tip to tip, above five. The bill is six inches long, straight, pointed, and strong, and its edges are thin and slightly serrated; the upper mandible is of a yellowish horn colour, darkest on the ridge, the under one yellow; a bare skin, of a greenish colour, is extended from the beak beyond the eyes; the irides of which are yellow, and give them a fierce and piercing aspect.—The brow and crown of the head are white, bordered above the eyes by black lines, which reach the nape of the neck, where they join a long flowing pendent crest of the same colour. The upper part of the neck, in some, is white, in others pale ash, the forepart lower down is spotted with a double row of black feathers, and those which fall over the breast are long, loose, and unwebbed; the shoulders and scapular feathers are also of the same kind of texture, of a grey colour generally streaked with white, and spread over its down-clothed back. The ridge of the wing is white; coverts and secondaries lead colour; bastard wings and quills of a bluish black, as are also the long, soft feathers, which take their rise on the sides under the wings; and, falling down, meet at their tips, and hide all the under parts: the latter, next the skin, are covered with a thick, matted, dirty-white down, except about the belly and vent, which are almost bare. The tail is short, and consists of twelve feathers of a cinereous or brownish lead-colour; the legs are dirty-green, long, bare above the knees, and the middle claw is jagged on the inner edge.

The female has not the long flowing crest, or the long feathers which hang over the breast of the male, and her whole plumage is more uniformally dull and obscure. In the breeding-season they congregate in large societies; and, like the rooks, build their nests on trees, with sticks, lined with dried grass, wool, and other warm materials. The female lays from four to six eggs, of a pale, greenish-blue colour.

The heron is described by Buffon as exhibiting the picture of wretchedness, anxiety, and indigence, condemned to struggle perpetually with misery and want, and sickened by the restless cravings of a famished appetite, &c. However faithful this ingenious naturalist may have been in pourtraying the appearance of the heron, yet others are not inclined to adopt his sentiments in describing its habits and manners, or to agree with him in opinion that it is one of the most wretched of animated beings. It is probable that it suffers no more than other birds, many species of which employ equal attention in looking for their prey, and it is not unlikely that the heron derives pleasure from it instead of pain. This bird, however, is of a melancholy deportment, a silent and patient creature; and will, in most severe weather,

stand motionless a long time in the water, fixed to a spot, in appearance like the stump or root of a tree, waiting for its prey, which consists of frogs, waternewts, eels, and other kinds of fish; and it is also said that it will devour field-mice.

The heron traverses the country to a great distance in quest of some convenient or favourite fishing spot, and in its aerial journeys soars to a great height, to which the eye is directed by its harsh cry, uttered from time to time while on the wing. In flying it draws the head between the shoulders, and the legs stretched out, seem, like the longer tails of some birds, to serve the office of a rudder. The motion of their wings is heavy and flagging, and yet they get forward at a greater rate than would be imagined.

In England herons were formerly ranked among the royal game, and protected as such by the laws; and whoever destroyed their eggs was liable to a penalty of twenty shillings for each offence. Heron hawking was at that time a favourite diversion among the nobility and gentry of the kingdom, at whose tables this bird was a favourite dish, and was as much esteemed as pheasants and peacocks.

Great White Heron. (*Ardea alba*, Linn.; *Le Heron blanc*, Buff.)—The great white heron is of nearly the same bulk as the common heron, but its legs are longer. It has no crest, and its plumage is wholly white; its bill yellow, and its legs black.

Its character and manner of living are the same as those of the common heron, and it is found in the same countries, though this species is not nearly so numerous. It has rarely been seen in Great Britain. Pennant, in his Arctic Zoology, says it is found in the Russian dominions, about the Caspian and Black Seas, the lakes of Great Tartary, and the river Irtisch, and sometimes as far north as latitude 53°. Latham says it is met with in New York, in America, from June to October; at different seasons of the year it is found in Jamaica, and in the Brazils: and our circumnavigators have met with it at New Zealand.

The Night Heron, Lesser Ash-coloured Heron or Night Raven. (*Ardea Nycticorax*, Linn.; *Le Bihoreau*, Buff.)—The length of this bird is about twenty inches; the bill is three inches and three quarters long, slightly arched, strong, and black, inclining to yellow at the base; the skin from the beak round the eye is bare, and of a greenish colour; irides yellow. A white line is extended from the beak, over each eye a black patch, glossed with green, covers the crown of the head and nape of the neck, from which three long narrow white feathers tipped with brown, hang loose and waving: the hinder part of the neck, coverts of the wing, sides and tail, are ash-coloured; throat white, forepart of the neck, breast, and belly, yellowish white or buff; the back black, the legs a greenish yellow. The female is nearly of the same size as the male, but she differs considerably in her plumage, which is less bright and distinct, being more blended with clay or dirty white, brown, grey, and rusty ash-colour, and she has not the delicate plumes which flow from the head of the male.

The night heron frequents the sea shores, rivers, and inland marshes, and lives upon crickets, slugs, frogs, reptiles, and fish. It remains concealed during the day, and does not roam abroad until the approach of night, when it is heard and known by its rough, harsh, and disagreeable cry, which is by some compared to the noise made by a person straining to vomit. Some ornithologists affirm that the female builds her nest on trees, others that she builds it on rocky cliffs: probably both accounts are right. She lays three or four white eggs.

This species is not numerous, although widely dispersed over Europe, Asia, and America.

The bird is indeed very uncommon in this country. Latham mentions one in the Leverian Museum, which was shot, not many miles from London, in May 1782.

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Voracity of the Heron.—In the month of April 1818, as a person was walking a short distance from the river Mole, in the neighbourhood of Cobham Park, Surrey, where H. C. Combe, Esq. has a heronry, he was surprised by a pike in weight full 2lbs. dropping from the air immediately before him: on looking up, he perceived a large heron hovering over him, which had no doubt dropped the fish from its beak. And also, during the same month, another individual near the above spot, saw a heron take a fish from the water, and after carrying it to a bank insert its bill into the vent of the fish, beginning to suck its entrails; he drove away the bird, and on taking up the fish, found it to be a pike weighing a pound and upwards.

* * *

Some hawks will not attack a heron, when it is first shown to them; but they may generally be brought to it by flying them at a cock, of a light colour, and by tying meat upon a heron's back, and allowing them to feed there. Small pieces of elder are put upon the heron's beak, to prevent him from wounding the hawk in training. The herons are caught by a slip-knot at the end of a long string, so arranged round their nests as to be drawn about their legs when they come upon their eggs. This is best done about sun-set; and the man who is to draw the string, must place himself to leeward of the nest. Herons will not feed when they are first taken; it is therefore necessary to cram them with food,

and to tie a piece of mat round their necks, to prevent them from throwing it up again.

* * *

A well-stocked heronry in an open country is necessary for this sport. The herons go out in the morning to rivers and ponds at a very considerable distance, in search of food, and return to the heronry towards the evening.

It is at this time that the falconers place themselves in the open country, down wind of the heronry; so that when the herons are intercepted on their return home, they are obliged to fly against the wind to gain their place of retreat. When a heron passes, *a cast* (a couple) of hawks is let go. The heron disgorges his food when he finds that he is pursued, and endeavours to keep above the hawks by rising in the air; the hawks fly in a spiral direction to get above the heron, and thus the three birds frequently appear to be flying in different directions. The first hawk makes his stoop as soon as he gets above the heron, who evades it by a shift, and thus gives the second hawk time to get up and to stoop in his turn. In what is deemed a good flight, this is frequently repeated, and the three birds often mount to a great height in the air. When one of the hawks seizes his prey, the other soon *binds to him*, as it is termed, and buoyant from the motion of their wings, the three descend together to the ground with but little velocity. The falconer must lose no time in getting hold of the heron's neck when he is on he ground, to prevent him from injuring the hawks. It is then, and not when he is in the air, that he will use his beak in his defence. Hawks have, indeed, sometimes, but very rarely, been hurt by striking against the heron's beak when stooping, but this has been purely by accident, and not (as has been said) by the heron's presenting his beak to his pursuer as a means of defence.

When the heron flies down wind, he is seldom taken, the hawks are in great danger of being lost, and as the flight is in a straight line, it affords but little sport.—*Bewick—Pennant—Sebright.*

Heronry, or Heronshaw, *s.* A place where herons breed.

Belon mentions it as one of the extraordinary feats performed by the divine king Francis I., that he formed two artificial heronries at Fontainebleau,—"the very elements themselves," he adds, "obeying the commands of this divine king (whom God absolve!!!), for to force nature is a work partaking of divinity." In order to enhance the merits of these French heronries, he undertakes to assert, that they were unknown to the ancients, because they are not mentioned in any of their writings; and for the same reason he concludes that there are none in Britain. Before Belon's time, on the contrary, and before the "Divine" constructor of heronries in France was born, there were express laws enacted in England for the protection of herons, it being a fine of ten shillings to take the young out of the nest, and six shillings and eight-pence for a person, without his own grounds, killing a heron, except by hawking, or by the long-bow; while in subsequent enactments, the latter penalty was increased to twenty shillings, or three months' imprisonment. At present, however, in consequence of the discontinuance of hawking, little attention is paid to the protection of heronries, though, I believe, none of the old statutes respecting them have been repealed. Not to know a hawk from a heron-shaw (the former name for a heron) was an old adage, which arose when the diversion of heron-hawking was in high fashion: it has since been corrupted into the absurd vulgar proverb, "not to know a hawk from a hand-saw."

In the breeding season they congregate, and make their nests very near each other. Mr. Pennant mentions having seen eighty nests on one tree. We once saw a heronry on a small island in a lake in the north of Scotland, whereon there was only one scrubby oak tree, which not being sufficient to contain all the nests many were placed on the ground.—*Sebright—Montagu.*

Herpes, *s.* A cutaneous inflammation.

Herring, *s.* A small sea-fish.

Of all migrating fish, the herring and the pilchard take the most adventurous voyages.

This mighty army begins to put itself in motion from the Icy Sea early in the spring: this body is distinguished by that name, for the word herring is derived from the German heer, an army, to express their number, which is so vast, that were all the men in the world loaded with herrings, they could not carry the thousandth part away. No sooner, however, is their asylum quitted, but millions of enemies collect to thin their squadrons. The fin fish and cacholot swallow barrels at a yawn; the porpoise, the grampus, the shark, and the whole numerous tribe of dog-fish, desist from making war upon each other, and make the herring their easy prey. The unnumbered flocks of sea fowl, that chiefly inhabit near the pole, watch the outset of their migration and spread extensive ruin. In this exigence the defenceless emigrants find no other safety but by crowding closer together,

and leaving to the outermost the danger of being first devoured. Thus, like frighted sheep (which ever run together in a body), each finding some protection in being but one of many that are equally liable to invasion, they separate into shoals: those to the west visit the American shores, while those holding to the east pour down towards Europe, endeavouring to evade their merciless pursuers by approaching the first shore that presents itself, which is that of Iceland, in the beginning of March. Upon their arrival on that coast, this phalanx, notwithstanding its diminutions, is still of amazing extent, depth, and closeness, covering an extent of shore as large as the island itself; the whole water seems alive, and by their foes the herrings are cooped up so closely, that any hollow vessel put into it takes them out of the water without further trouble. The power of increasing in these animals exceeds our idea, as it would in a very short time outstrip all calculation. A single herring, it is affirmed, if suffered to multiply unmolested and undiminished for twenty years, would show a progeny greater in bulk than ten such globes as that we live upon; but happily the balance of nature is exactly preserved, and their consumption is equal to their fecundity. Upon this account, we must consider the fish and fowl that so incessantly attack them, not as plunderers, but as the benefactors of mankind: without their aid the sea would soon be overcharged with the burden of its own productions, and that element, which at present distributes health and plenty to the shore, would but load it with putrefaction.

These collective masses that come upon our coasts, begin to appear off the Shetland Isles in April and May; these are only the forerunners of the grand shoal which comes in June, and their arrival is marked by the numbers of birds, such as gannets and others, which follow them as their prey. But when the main body approaches, its breadth and depth alters the very appearance of the ocean. They divide into distinct columns of five or six miles long, and three or four broad, while the water before them ripples as if forced out of its bed; sometimes they sink for ten or fifteen minutes, then rise again to the surface, on which in bright weather they reflect a variety of splendid colours, like a field bespangled with the most precious gems, in which, or rather in a much more valuable light, should this stupendous gift of Providence be considered by the inhabitants of the British Isles. The fishermen are ready prepared for their reception, and by nets made for the occasion they sometimes take above two thousand barrels at a single draught.

After this check from the Shetland Isles, which divide the army into two parts, one wing takes to the eastern shores of Great Britain, and fills every bay and creek with its numbers; the other pushes on towards Yarmouth, the great and ancient mart of herrings; they then pass through the British Channel, and after that in a manner disappear. Those which take to the west, after offering themselves to the Hebrides, where the great stationary fishery is, proceed towards the north of Ireland, where being interrupted they make a second division; that to the western side is scarcely perceived, being soon lost in the immensity of the Atlantic, whilst the other, which passes into the Irish Sea, rejoices and feeds the inhabitants of most of the coasts that border upon it.

* * *

The herring is always found in shoals, and on some occasions are crowded so close together, as to fill the sea, at least so far as our implements can reach, from top to bottom. Ships are said to have been retarded in their course in passing through these shoals, and instances are recorded where these little fishes have been left by the ebbing of the tide in heaps three feet deep upon the shores for many miles in extent. It is universally credited among those conversant in the herring fishery, that no other fish will go into the middle of a shoal. The whale, to whom they are a favourite repast, and who swallows a thousand at once, never ventures into the shoal, but hovers about the skirts of it, and regularly follows their course. The dog-fish, which in vast troops assiduously attend the herrings wherever they go, carefully keep aloof from the great mass of them; so it is with other fishes, who delight in the herring as a prey, but as a body seem to dread their multitudes.

* * *

Herring Fishing.—To approach the fleet was a task of some difficulty. The nets, extended in interminable lines, were so frequent, that much skill was necessary to penetrate this hempen labyrinth, without fouling the back ropes. Warning cries directed our course, and with some delay we treaded the crowded surface, and, guided by buoys and puckawns, found ourselves in the very centre of the flotilla.

It was an interesting scene; momently the boats glided along the back ropes, which were supported at short intervals by corks, and at greater by inflated dog-skins, and raising the curtain network, which these suspended, the herrings were removed from the meshes, and deposited in the boats. Some of the nets were particularly fortunate, obliging their proprietors to frequently relieve them of the fish; while others, though apparently stretched within a few yards, and consequently in the immediate run of the herrings, were favoured with but a few stragglers; and the indolent

fisherman had to occupy himself with a sorrowful ditty, or in moody silence watched the dark sea "like a strange soul upon the Stygian banks staying for waftage."

The darkness of the night increased the scaly brilliancy which the phosphoric properties of these beautiful fish produce. The bottom of the boat, now covered with some thousand herrings, glowed with a living light, which the imagination could not create, and the pencil never imitate. The shades of gold and silvery gems were rich beyond description: and much as I had heard of phosphoric splendour before, every idea I had formed fell infinitely short of its reality.—*Buffon—Wild Sports.*

Herring Gull (*Larus fuscus*, Linn.) *s.* A genus thus characterised:—

This species weighs about thirty-three ounces; length twenty-three inches; bill yellow; on the lower mandible a reddish-orange spot; irides light yellow; orbits red. Head, neck, tail, and under parts, white; back, scapulars, and wing coverts, ash-colour; quill-feathers, dusky, the five first black towards their ends, with a white spot near the tip; legs pale flesh-colour.

* * *

Whether these immatured birds breed we cannot be certain, but are inclined to think they do, as we saw a great many of them intermixed with the perfect ones in the gullery on an island off St. David's, where the nests were innumerable: they seemed equally clamorous with the others when disturbed. The nests were on the top of the island, amongst the grass and loose stones, composed of a small quantity of long dry grass, the eggs, which were two in number, of a dark olive-brown, with dusky blotches. Like others of the genus, this bird feeds indiscriminately on fish, and various other productions of the sea, particularly the star-fish. It is sometimes observed to trample the soft sand, by moving its feet alternately in the same place: for what purpose this singular action is intended, we cannot say, unless it is to force up the sand eels or other hidden prey, as the one mentioned above did the worms.—*Montagu.*

Hide, *s.* The skin of any animal, either raw or dressed; the human skin.

Hidebound, *v.* A horse is said to be hide-bound, when his skin sticks so hard to his ribs and back, that you cannot with your hand pull up or loosen the one from the other; in trees, being in the state in which the bark will not give way to the growth.

Highland, *s.* Mountainous region.

Highway, *s.* Great road, public path.

Hill, *s.* An elevation of ground less than a mountain.

Hillock, *s.* A little hill.

Hilly, *a.* Full of hills, unequal in the surface.

Hind, *s.* The she to a stag; a servant; a peasant, a boor.

Hip, *s.* The joint of the thigh; the fleshy part of the thigh; the fruit of the briar.

Hip, *v.* To sprain or shoot the hips.

Hipshot, *a.* Sprained or dislocated in the hip.

Hirundo, *s.* Swallow, a genus thus characterised:—

Bill short, much depressed, and wide at the base; the upper mandible being keeled and bent at the tip; gape extending as far backwards as the eyes; nostrils at the base of the bill, oblong, and partly covered by a membrane; legs with the shank short; the toes slender, three before and one behind; the outer toe united to the middle one as far as the first joint; tail of twelve feathers, generally forked; wings long and acuminated, the first quill being the longest.—*Montagu.*

Hit, *v.* To strike, to touch with a blow; to touch the mark, not to miss; to reach the point; a lucky chance; a game at backgammon.

Hitch, *s.* A knot or noose taken on a rope.

HIVE, *s.* The habitation or cell of bees; the bees inhabiting a hive.

HOAR, *a.* White; grey with age; white with frost.

HOBBY, *s.* A species of hawk; an Irish or Scottish horse.

The Hobby. (*Falco subbuteo*, LINN.; *Le Hobereau*, BUFF.)—The length of the male is twelve inches; breadth about two feet. The bill is blue; cere and orbits of the eyes yellow; the irides orange; over each eye there is a light-coloured streak; the top of the head and back are of a bluish black; the wing coverts the same, but in some edged with rust colour; the hinder part of the neck is marked with two pale yellow spots; a black mark from behind each eye, forming almost a crescent, is extended downwards on the neck; the breast and belly are pale, marked with dusky streaks; the thighs rusty, with long dusky streaks; the wings brown; the two middle feathers of the tail are of a deep dove colour, the others are barred with rusty and tipped with white. The female is much larger, and the spots on her breast more conspicuous than those of the male; the legs and feet are yellow.

The hobby breeds with us, but is said to emigrate in October. It was formerly used in falconry, chiefly for larks and other small birds, which were caught in a singular manner: when the hawk was cast off, the larks, fixed to the ground through fear, became an easy prey to the fowler, who drew a net over them. Buffon says that it was used in taking partridges and quails.

A male hobby perceiving a goldfinch in a cage, within a window which happened to be open, dashed at the imprisoned bird, notwithstanding several persons were in the room; but being alarmed at the natural vociferations of some young ladies for the safety of their darling, the intruder mistook the passage by which he entered, and flew against the glass, when his retreat was cut off, and he was secured.

This species was formerly trained for hawking, but more commonly used for taking partridges and larks with a net, which was termed daring, that is, the hobby was cast off, which so frightened the birds, that they readily suffered a net to be drawn over them.—*Montagu.*

HOCK, *s.* The joint between the knee and fetlock; old strong Rhenish.

HOE, *s.* An instrument to cut up the earth.

HOG, *s.* The general name of swine; a castrated boar.

To prepare Hog's Fur.—Take according to the quantity of fur you have: if a pound, four quarts of water; cut down into it two ounces of soap with a noggin of stale urine; throw in your fur, and let it come to a high scald, and while it is coming to that, keep it constantly under the liquor. Lay it by to cool, and when cool enough gently squeeze and press with your hands, and throw it into cold water. Then in some clean water, about two quarts, dissolve about the size of two walnuts of alum, and when it boils throw in your fur, press it well, and throw it into clean water; press it, and throw off the water, pour in more, and do the same at least three times. You must open your fur before you can dye it, as this process will cement it together. As to mohair it needs nothing more than washing with soap and water, to be boiled as above in alum, and washed.—*Old Recipe.*

HOGGEREL, *s.* A two-years-old ewe.

HOGSHEAD, *s.* A measure of liquids containing sixty gallons; any large barrel.

HOG'S LARD, *s.* An article of some importance in veterinary surgery, being the basis of almost every ointment.

Hog's lard possesses a laxative quality, and may be given to the extent of half a pound, melted or mixed with warm water or peppermint water, as a substitute for castor oil, olive oil, or linseed oil, when neither of those can be procured. Fresh hog's lard melted, and mixed with a little salad oil, forms a good softening ointment for horses' heels that are subject to cracks.—*White.*

HOLD, *s.* The act of seizing; gripe, grasp, seizure; something to be held; hold of a ship, all that part which lies between the keelson and the lower deck; a lurking-place.

HOLE, *s.* A cavity narrow and long; a cave, hollow place; cell of an animal.

Hollow, *v.* To shout, to hoot. *View hollow!* The hunter's halloo! given when the game is viewed by the hounds.

Holly, *s.* A tree.

Honey, *s.* A thick, viscous, luscious substance, which is collected and prepared by bees. Honey is divided into three kinds; virgin honey, the first produce of the swarm, obtained by drawing, without pressing the comb; a second, or thicker kind, produced by pressure; and a third and worst description extracted by heating, and then pressing the comb.

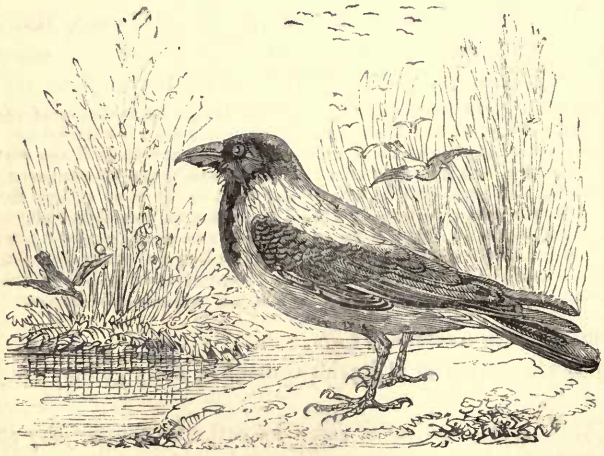
Honeycomb, *s.* The cells of wax in which the bee stores her honey.

Honeycombed, *a.* Flawed with little cavities; a term used to describe the injuries produced by rust on cannon and gun barrels.

Hood, *s.* Anything drawn upon the head, and wrapping round it; a cap of leather put on the hawk's head immediately after he is taken. It is so constructed as to prevent him from seeing, but to allow him to feed; and may be put on or taken off at pleasure. To hood a hawk requires a degree of manual dexterity that is not easily acquired.

Hood, *v.* To blind as with a hood.

Hooded or Royston Crow (*Corvus cornix*, Linn.; *La Corneille mantelée*, Buff.) *s.*



This bird is somewhat larger and more bulky than the rook, measuring twenty-two inches in length. Its bill is black, and two inches long; the head, fore part of the neck, wings, and tail, are black; the back and all the under parts are of a pale ash-colour; legs black.

These birds arrive with the woodcock, and on their first coming frequent the shores of rivers. They depart in the spring to breed in other countries, but it is said that they do not all leave us, as they have been seen during the summer months in the northern quarters of our island, where they frequent the mountainous parts of the country, and breed in the pines. In more northern parts of the world they continue the whole year, and subsist on sea-worms, shell-fish, and other marine productions. With us they are seen to mix with and to feed in the same manner as the crow. During the breeding season they live in pairs, lay six eggs, and are said to be much attached to their offspring.—*Bewick.*

HOODED GULL, (*Larus atricilla*, LINN.) *s.*

The bill and feet are deep lake red; hood of dark bluish ash-colour; quill feathers all black, and two inches longer than the tail; length of the shank one inch and three-fourths. In the month of August, 1774, we saw five of them together feeding in a pool upon the shingley flats near Winchelsea; two only were black on the head; the others were mottled all over with brown. We also saw two others near Hastings, in Sussex. It is found in Russia and America, and, according to Natterer, on the coasts of the Mediterranean and the Adriatic.—*Montagu—Temminck.*

HOODWINK, *v.* To blind with something bound over the eyes.

HOOF, *s.* The hard horny substance which composes the feet of several sorts of animals.

Hoof Ointment.—Tar and tallow in equal parts: when melted let the mixture be removed from the fire, and stirred until it is cold. This ointment is applied to the coronet and heels, when dry and cracking.—*White.*

HOOK, *s.* Any thing bent so as to catch hold; the bended wire on which the bait is hung for fishes, and with which the fish is pierced; a snare, a trap; a sickle to reap corn; an iron to seize the meat in the caldron; an instrument to cut or lop with; the part of the hinge fixed to the post.

In the choice of hooks, those should be preferred that are longish in the shanks, strong, and rather deep in the bend, the point fine and straight, and as true as it can be set to the level of the shank (which, for fly making, should be tapered off to the end, that the fly may be the neater finished), the point should be sharp and the barb of a proper length; many experienced anglers, who have impartially tried both kinds, consider these to be more sure than the crooked hooks, that they cause a smaller orifice, and are less liable to break their hold. At Limerick, in Ireland, the best of these hooks are manufactured. A hook, whose point stands outwards, ought never to be chosen, as it frequently scratches the fish without laying hold; if the points were somewhat shorter, and the barbs a trifle wider, the hooks of every maker would be improved. When hooks are blunt, a small whetstone will restore their sharpness much better than a file, which always leaves them rough and jagged.

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I find, by sad experience, that in hook-making the Irish are far before us; our workmen either do not understand the method of forming and tempering hooks, or they do not take sufficient pains in their manufacture. It is strange, that when so much of the angler's pleasure and success depends upon the quality of his hooks, that more attention is not bestowed upon their fabrication. The art of forming, and the process of tempering them, appears simple enough; and that little difficulty is required to attain it, is evident from the fact that many fishermen make their own hooks. For my own part, however, I consider hook-making to be an unnecessary accomplishment for the angler, as the best hooks in the world can be procured without trouble, and at a trifling expense, from O'Shaughnessy of Limerick. * * *

I have even made a hook, which, though a little inferior in form, in other respects, I think I could boast as equal to the Limerick ones.

I never used any hooks for salmon-fishing except those which I am sure have been made by O'Shaughnessy of Limerick; for even those made in Dublin, though they seldom break, yet they now and then bend; and the English hooks, made of cast-steel, in imitation of Irish ones, are the worst of all.

* * *

Hooks, to whip on.—When hooks are armed, especially to hair, it should be done with small but strong silk, well rubbed with shoemaker's wax, after having smoothed the shank with a whetstone, to hinder its fretting; from a straw's breadth below the top of the hook, wrap the silk about the bare shank until it comes to the top, which will prevent its slipping, or cutting the line from frequently using; then lay the hair or gut on the inside and whip the silk downwards almost to the bend of the hook; the colour of the arming silk should be as near that of the baits used as may be, and its size be regulated by the thickness of the wire, hair, or gut, to which it is joined. In whipping on a hook, it is to be held in the left hand, and the silk whipped down to within four turns of its bend; the shank is then to be taken between the fore finger and thumb of the left hand, and the end of the silk close to it, holding them both tight, and leaving the ends of the silk to hang down; the other part of the silk is then to be

drawn into a large loop, and with the right hand, turning backwards, continue the whipping for four turns, and draw the end of the silk, which has hung down under the left thumb, close, and cut it off. — *Salmonia* — *Wild Sports*—*Daniel.*

Hook, *v.* To catch with a hook; to entrap; to draw as with a hook.

Hooked, *a.* Bent, curvated.

Hooknosed, *a.* Having the aquiline nose rising in the middle.

Hoop, *s.* Anything circular by which something else is bound, particularly casks or barrels.

The hoop net is a very destructive engine. For large and deep waters the mesh should be an inch and three quarters, the length full nine feet, and the hoops (of which that in the centre should be iron, rounded like a curtain rod, and painted red to prevent its rusting) should be strong and three feet high. In laying hoop nets, place them where the water gets tolerably deep from a gravelly scour. All the infallible attraction of brass candlesticks, yellow ribands, flowers, and looking-glasses, are superseded by the arcanum of encircling a live fish brought from other waters in each hoop net; whether the old inhabitants approach the stranger out of vengeance or curiosity remains a mystery, but that they will run into the hoop net to get at him, Mr. Daniel positively insists. It was a secret which an old gamekeeper would not impart, until after being in his service for many years.—*Daniel.*

Hoop, *v.* To bind or enclose with hoops; to encircle; to clasp.

Hoot, *v.* To shout in contempt; to cry as an owl.

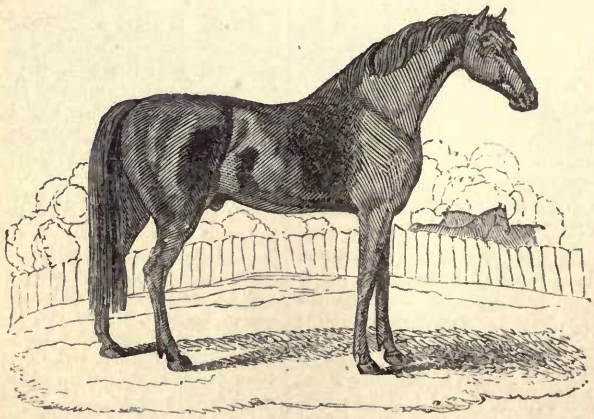
Hop, *s.* A plant, the flowers of which are used in brewing. Hops were introduced into England in the sixteenth century, from the Netherlands.

Horn, *s.* The hard pointed bodies which grow on the heads of some quadrupeds, and serve them for weapons; an instrument of wind music, made of horn; the extremity of the waxing or waning moon; the feelers of a snail; a drinking cup made of horn.

Hornet, *s.* A very large, strong, stinging fly.

Hornowl, *s.* A kind of horned owl. *Vide* Owl.

Horse, *s.* A quadruped used in war, draught, and carriage.



The generic character of horses, according to Linnæus, is, that the fore-teeth are twelve in number, the upper six erect and parallel, the lower six more prominent; the tusks are

solitary, included, remote; teats two, inguinal: they fight by biting, and kicking with the hind feet; and they have the singular property of breathing only through the nostrils, and not through the mouth.

Cuvier places the horse in the class Mammalia, which contains those animals that suckle their young, and forms the ninth genus of his sixth order, called Pachydermata, of which order the following are characters:—Skin very thick; some of the genera are partially without teeth, others with three sorts of teeth; quadrupedal, generally with hoofs, and the toes varying in number; stomach simple, and they do not ruminate; without clavicles, or collar-bones. They are either herbivorous or omnivorous, and their habits are various. They generally inhabit the temperate and torrid zone.

The genus Equus is subdivided by Cuvier into six species, and thus defined:—Incisory teeth, six in the upper jaw, and six in the under; two canines, one above and one below, on each side of the cutting or incisory teeth, (the females of some of the species with no canine teeth,) and six cheek teeth, or grinders, on each side, on both jaws; they are furrowed on both sides with flat crowns and several ridges of enamel. Between the canines and cheek teeth is a void space; the upper lip is susceptible of considerable motion; the eyes are large; the pupil oblong-ovate, placed laterally; their sight excellent, and, although not formed for seeing in the night, they can distinguish objects very clearly in the dark; ears rather small, pointed, and erect, having great mobility in the external conch, so that their hearing is very acute, and is the sense which, in all probability, they possess in the greatest perfection; feet, with a single apparent toe, covered with a thick hoof; the tail is furnished with long hair, or with a tuft at the extremity; mammæ two, inguinal; the stomach is simple and membranaceous, and the intestines and cæcum very large.

The six species of this genus are the horse, ass, common zebra, zebra of the plains, quagga, dzhiggtai, with the mule, which may be regarded as a sub-species.

Of all quadrupeds, the horse possesses, along with grandeur of stature, the greatest elegance and proportion of parts. By comparing him with the animals above or below him, we find that the ass is ill made, and that the head of the lion is too large; that the limbs of the ox are too slender, and too short in proportion to the size of his body; that the camel is deformed; and the grosser animals, as the rhinoceros, hippopotamus, and elephant, may be considered as rude and shapeless masses. The great difference between the head of man and that of the quadruped, consists in the length of his jaws, which is the most ignoble of all characters. But, although the jaws of the horse be very long, he has not, like the ass, an air of imbecility, nor, like the ox, of stupidity. The regularity and proportion of the parts of his head, give him a light and sprightly aspect, being gracefully attached to his finely arched neck, which is well supported by the beauty of his chest. He elevates his head, as if anxious to exalt himself above the condition of other quadrupeds. In this noble attitude he regards man, face to face. His eyes are open, lively, and intelligent; his ears handsome, and of a proper height, being neither too long, like those of the ass, nor too short, like those of the bull. His mane adorns his graceful neck, and gives him the appearance of strength and courage. His long bushy tail covers, and terminates with advantage, the extremity of his body. His tail, very different from the short tails of the deer, elephant, and hippopotamus, and from the naked tails of the ass, camel, and rhinoceros, is formed of long, thick hairs, which seem to rise from his crupper, because the trunk from which they proceed is very short. He cannot, like the lion, elevate his tail; but, though pendulous, it becomes him better; and as he can move it from side to side, it serves him to drive off the flies, which incommode him; for though his skin is very firm, and well garnished with close hair, it is, nevertheless, very sensible.

* * *

Brown says, the head of the horse should not be too long, and it ought to be rather thin than otherwise. The front should be narrow, and a little convex; the eye-pits well filled, and the eye-lids thin; the eyes large and prominent, clear, lively, and sparkling with fiery glances; the pupil should be large; the under jaw should be a little thick, but not fleshy; the nose slightly arched; the nostrils open and deep, and divided by a thin septum or partition; the ears should be small, erect, and narrow, but not too stiff, and placed on the upper part of the head, at a proper distance from each other, but not too wide, as this always gives a horse a disagreeable aspect; the mouth should be delicate, and moderately split; the withers sharp and elevated; the shoulders flat and not confined; the back equal, a little arched lengthwise, and raised on each side of the spine, which should have the appearance of being slightly sunk; the flanks short and full; the crupper round and plump; the haunches well furnished with muscular flesh; the dock, or fleshy part of the tail, firm and thick; the thighs large and muscular; the hough round before, broad on the sides, and tendinous behind; the shank thin before, and broad on the sides; the tendo Achillis prominent, strong, and well detached from the leg-bone; and the fetlock somewhat prominent, and furnished with a small tuft of

long hair behind; the pasterns should be of a middling length, and pretty large; the coronet a little elevated; the hoof black, solid, and shining; the instep high; the quarters round; the heels broad, and a little prominent; the frog thin and small, and the sole thick and concave.—*Vide* ARABIAN—HUNTER—ROADSTER, RACE HORSE, &c. * *

The horse is considered to have been originally a native of what is called the old world, and by the industry of man to have been planted in the new. It appears from the sacred records, that his subjugation did not take place until many years after that of the camel and the ass.

At what precise time foreign horses were brought into Britain is uncertain; but it is not improbable that it was a very early one, since history informs us they were sufficiently numerous, and their uses well known, when Julius Cæsar invaded the island. Whether these early horses were the entire produce of Britain, or whether they had already been mixed, it is likely that their intercourse with the Roman cavalry would introduce new races, as diversified as the countries from whence the Romans themselves drew their own immense supplies. Freed from their conquerors, the English cultivated the arts of peace, and were consequently not unmindful of the horse, which was become, as early as A.D. 930, so valuable that Athelstan prohibited their exportation.

William the Conqueror brought with him the means of greatly improving the island horse; and the barons who accompanied him, being spread over the kingdom, in their newly acquired estates, rapidly diffused a valuable mixture among the native breeds. One of these nobles (Roger de Belesme, Earl of Shrewsbury) is particularly celebrated for introducing Spanish stallions into his Welsh possessions.

In 1121, the first Arabian horse on record was imported into England, and the crusades, which soon succeeded, were the means of introducing a large accession of eastern horses from the Levant. The traffic in horses now began to assume much of its future character: Smithfield was established as a horse-market; and the dealing in this animal was already become a regular profession, as well as already garnished with much of its trickery.

To Edward the Second the breed of English horses owes much of its early improvement: he procured cavalry horses from Lombardy, Italy, and Spain, and heavy draught horses from Flanders. From this time the public attention appears to have been particularly directed to the necessity of improving the breed of horses; and many public ordinances were promulgated to that effect. In the reigns of Henry VII. and VIII. it became common to import foreign stallions for this purpose from Barbary and Spain; and, in the two following reigns, others were imported from Belgium, Flanders, and Denmark; and as the former were intended to improve the speed, spirit, and beauty, these latter added greatly to the size of the future breeds. As early as the twelfth and thirteenth centuries, there were horse-races in England; but these appear to have been principally confined to trials of speed and continuance over uncertain grounds between native horses. In the reign of Henry VIII., horses either procured from Barbary, or bred from such, were expressly used for this purpose; and we may date the systematic improvement in the breed, by the admixture of what we call *blood*, to have its origin about this time.

James the First pursued the system, and imported from Barbary a set of the finest mares, for purity of breed and excellence of form, which could be procured: these, known significantly as the *Royal Mares*, greatly assisted the general purpose. James also imported an Arabian, whose own qualities, as well as those of his produce, not answering to the expectations raised, the breed for many years became in disrepute. Regular race-courses were now established, and racing was conducted on fixed principles, and confined within rules. Charles the First encouraged these sports, and to him we owe the establishment of the Newmarket course; and in such estimation were they, as connected with the national good, that even the fanaticism of Cromwell gave way to it, for he also had his stud of race-horses. The Restoration gave a new impulse to racing, and a new impetus to the improvements meditated. The Arabian was again resorted to, and, on the renewed trials, his proceeds justified the former expectations. From that time to the present, by a judicious mixture of *crossings* of the native and the eastern horses, in different degrees of consanguinity, according to the different purposes for which they are required, we now stand unrivalled among nations; and we now send our breeds back to eastern countries, to meliorate that *blood* which we originally borrowed from them.

* * *

It would appear that the ancient Irish horses were held in high estimation:—

"Horses they have of pace easie, in running wonderful swift. Therefore they make of them great store, as wherein at times of need they repose a great piece of safetie.

"I heard it verrified by honourable to honourable, that a nobleman offered (and was refused) for one such horse, an hundred kyne, five pound lands, and an aery of hawks yearly during seven years."—*Brown—Blaine—Strutt—Campion.*

HORSE, *v.* To mount upon a horse; to cover a mare.

HORSEBACK, *s.* The seat of the rider, the state of being on a horse.

HORSEBEAN, *s.* A small bean usually given to horses.

HORSEBREAKER, *s.* One whose employment is to tame horses to the saddle.

HORSECHESTNUT, *s* A tree, the fruit of a tree.

HORSECOURSER, *s. obs.* One that runs horses, or keeps horses for the race; a dealer in horses.

HORSEHAIR, *s.* The hair of horses. *Vide* HAIR.

HORSELEECH, *s.* A leech that bites horses; a farrier.

HORSEMAN, *s.* One skilled in riding; one that serves in wars on horseback; a rider, a man on horseback.

HORSEMANSHIP, *s.* The art of riding, the art of managing a horse.

HORSEPOND, *s.* A pond for watering horses.

Pond water, from a clay bottom, is by some preferred to running water; but in summer stagnant water often becomes putrid and nauseous, and is consequently highly injurious.

HORSERACE, *s.* A match of horses in running. *Vide* RACING.

HORSESHOE, *s.* A plate of iron nailed to the feet of horses; an herb. *Vide* SHOE.

HOSTLER, *s.* One who has the care of horses at an inn.

HOT, *a.* Having the power to excite the sense of heat; fiery; ardent, vehement, eager.

HOUGH, *s.* The lower part of the thigh. HOUGH, *v.* To hamstring, to disable by cutting the sinews of the ham.

HOUND, *s.* A dog used in the chase.

The old English hound or Talbot. (*Canis Sagax*, LINN.)—This is undoubtedly the origin of those famous hounds for which Great Britain is celebrated above all other countries. In former times this dog was of a pure white, but is now generally of a white and black colour, and tanned over the eyes.

This majestic animal is distinguished by his great size and strength; his body is long, his chest deep, and his ears long and sweeping, with great gravity of expression. From the particular formation of his organs, or from the extraordinary moisture which always flows from his nose, or from some other unknown cause, he is endowed with the most exquisite sense of smelling, and can discover scent hours after other dogs have given up.

Although the talbot hunts with great certainty, yet he becomes tedious from the slowness of his motions; this, however, enables him to receive more distinctly the directions of the huntsman. And he can trace with a cold scent, which he is too apt to make so by his want of speed.

The talbot, in the "History of Manchester," is stated to be the original breed of this island, used by the ancient Britons in the chase of larger kinds of game, with which the country at one time abounded. They were common in all parts of the kingdom, and were much larger than they are at present; and have been gradually declining in consequence of mixing them with lighter dogs for the purpose of increasing their speed. We have no doubt that, from this cause, the breed will eventually become extinct.

It is said, that the tone of his voice is peculiarly deep, sonorous, powerful, and mellow.

* * *

Among sportsmen it is generally understood that hounds of the middle size are the most proper, all animals of that description being stronger than such as are either very small or very large. The shape ought to be particularly attended to; for, if the hound be not well proportioned, he can neither run fast nor do much work. His legs ought to be straight, his feet round and not very large, his shoulders back, his breast rather wide than narrow, his chest deep, his back broad, his head small, his neck thin, his tail thick and bushy and well carried. None of those young hounds which are out at the elbows, or such as are weak from the knee to the foot, should

ever be taken into the pack. That the pack may look well, the hounds should be as much as possible of a size; and if they be also handsome, the pack will then be perfect. This, however, contributes nothing to the goodness of a pack, for very unhandsome packs, consisting of hounds entirely different in size and colour, often afford very good sport.

It is only necessary that they should run well together; to which indeed a uniformity in size and shape seems to contribute. The pack that can run ten miles, or any other considerable space, in the shortest time, may be said to go fastest, though the hounds taken separately might be considerably inferior to others in point of swiftness. A pack of hounds considered in a collective body, go fast in proportion to the excellence of their noses and the head they carry. Packs composed of hounds of various kinds seldom run well. When the packs are very large, the hounds are seldom sufficiently hunted to be good; twenty or thirty couple, therefore, or at most forty, will be sufficient for the keenest sportsman in this country, as thus he may be enabled to hunt three and even four times a week. The number of hounds to be kept must however, in a considerable degree, depend on the strength of the pack, and the country in which they hunt. They should be left at home as seldom as possible; and too many old hounds should not be kept. None ought to be kept above five or six seasons, though this also is somewhat uncertain, as we have no rule for judging how long a hound will last. In breeding hounds, considerable attention ought to be paid to the dog from which you breed. All such are to be rejected as have a tender nose, or are babblers or skirters. An old dog should never be put to an old bitch. January, February, and March, are the best months for breeding; late puppies seldom thrive. After the females begin to grow big with young, it will not be proper to let them hunt any more, or indeed to remain for a much longer time in the kennel. Sometimes these animals will have an extraordinary number of whelps. Mr. Beckford informs us, that he has known a bitch have fifteen puppies at a litter; and he assures us, that a friend of his informed him, that a hound in his pack brought forth sixteen, all alive. In these cases it is proper to put some of the puppies to another bitch, if you want to keep them all; but, if any are destroyed, the best coloured ought to be kept. The bitches should not only have plenty of flesh, but milk also; and the puppies should not be taken from them till they are able to take care of themselves; their mothers will be relieved when they learn to lap milk, which they will do in a short time. After the puppies are taken away from their mother, the litter should have three purging balls given them, one every other morning, and plenty of whey the intermediate day. If a bitch bring only one or two puppies, and you have another that will take them, by putting the puppies to her, the former will soon be fit to hunt again. She should, however, be first physicked, and it will also be of service to anoint her dugs with brandy and water. Whelps are liable to the distemper, to which dogs in general are subject, and which frequently makes great havoc among them at their walks. Young hounds should be fed twice a day, as they seldom take kindly to the kennel-meat at first, and the distemper is most apt to seize them at this time. It is impossible to determine how many young hounds ought to be bred in order to keep up the pack, as this depends entirely on contingencies. The deficiencies of one year must be supplied by the next; but it is probable, that from thirty to thirty-five couple of old hounds, and from eight to thirty-five couple of young ones will answer the purpose, where no more than forty couple are to be kept. A considerable number, however, ought always to be bred; for it is undoubtedly and evidently true, that those who breed the greatest number of hounds must expect the best pack. After the hounds have become acquainted with the huntsman, and answer to their names, they ought to be coupled, and walked out among sheep; and two dogs should not be coupled together, when you can avoid it. As young hounds are awkward at first, a few ought only to be sent out at a time, with people on foot, and they will soon afterwards follow a horse. With regard to the first entering of hounds to a scent, our author gives the following directions:—"You had better enter them at their own game; it will save you much trouble afterwards. Many dogs, I believe, like that scent best which they were first blooded to: but, be this as it may, it is most certainly reasonable to use them to that which it is intended they should hunt. Hounds ought to be entered as soon as possible, though the time must depend on the nature of the country in which they are. In corn countries hunting may not be practicable till the corn is cut down; but you may begin sooner in grass countries, and at any time in woodlands. Hounds at their first entrance cannot be encouraged too much. When they are become handy, love a scent, and begin to know what is right, it will then be soon enough to chastise them for what is wrong; in which case one severe beating will save a great deal of trouble. When a hound is flogged, the whipper in should make use of his voice as well as his whip. They should be low in flesh when you begin to hunt, the ground being generally hard at that time, so that they are very liable to be shaken. Sometimes the

huntsman turns down a cat before them, which they kill; and, when the time of hunting approaches, he turns out young foxes or badgers; taking out some of the most steady of his old hounds to lead on the young ones. Small covers and furze brakes are drawn with them to use them to a halloo, and to teach them obedience. If they find improper game, and hunt it, they are stopped and brought back; and as long as they will stop at a rate, they are not chastised. To render fox-hunting complete, no young hounds should be taken into the pack the first season; a requisite too expensive for most sportsmen. The pack should consist of about forty couple of hounds, that have hunted one, two, three, four, or five seasons. The young pack should consist of about twenty couple of young hounds, and an equal number of old ones. They should have a separate establishment, and the two kennels should not be too near one another. When the season is over, the best of the young hounds should be taken into the pack, and the draft of old ones exchanged for them. Many must be bred to enable a sportsman to take in twenty couple of young hounds every season. It will always be easy to keep up the number of old hounds, for, when your own draft is not sufficient, drafts from other packs may be obtained, and at a small expense. When young hounds are hunted together for the first season, and have not a sufficient number of old ones along with them, it does more harm than good."—*Vide* Beagle, Harrier, Fox and Stag-hound.

* * *

NAMES OF HOUNDS.

A. *dogs.*
Antic
Ardent
A. *bitches.*
Active
Airy
B. *dogs.*
Bachelor
Bellman
Blaster
Bluecap
Bouncer
Bowler
Bravo
Brazen
Brilliant
Brusher
Bustler
B. *bitches.*
Bashful
Beauty
Beldam
Blowsy
Bluebell
Brimstone
Busy
Buxom
Captain
Carver
Charon
Chaser
Chanter
Chieftain
Chimer
Clinker
Comrade
Comus
Constant
Coxcomb
Crasher
Crowner
Cruiser
Crusty
Cryer
C. *bitches.*
Careless
Charmer
Chantress
Clio
Comely
Crafty
Crazy
Crony
D. *dogs.*
Damper
Danger
Dasher
Dashwood
Driver
Duster
D. *bitches.*
Dainty
Darling
Dashaway
Dauntless
Dian
Dulcet
E. *dogs.*
Eager
Earnest
E. *bitches.*
Easy
Endless
F. *dogs.*
Factor
Fervent
Finder
Flasher
Fleecer
Flippant
Foamer
Forward
F. *bitches.*
Faithful
Fairmaid
Fearless
Fickle
Fidget
Firetail
Flighty
Flourish
Fretful
Frisky
Frolic
Fury
G. *dogs.*
Gainer
Gallant
Gimcrack
Glancer
Glider
Growler
Grumbler
G. *bitches.*
Gayless
Giddy
Gladsome
Graceful
H. *dogs.*
Hardy
Havoc
Hazard
Headstrong
Hearty
Hector
Hero
Hopeful
Hotspur
H. *bitches.*
Hasty
Handsome
Harlot
Helen
J. *dogs.*
Jingler
Jockey
Jolly
Judgment
J. *bitches.*
Joyful.
L. *dogs.*
Lasher
Leader
Lictor
Lifter
Lightfoot
Lounger
Lusty
L. *bitches.*
Lawless
Lively
Lofty
Lovely
M. *dogs.*
Marksman
Marplot
Match'em
Meddler
Mendall
Merlin
Messmate
Monarch
Motley
Mounter
Mungo
M. *bitches.*
Madcap
Magic
Minion
Mischief
Music
N. *dogs.*
Nestor
Nettler
Newsman
Nimrod
Noble
Nonsuch
N. *bitches.*
Nimble
Noisy
Novice
P. *dogs.*
Pealer
Perfect
Phœbus
Pilgrim
Pilot
Piper
Playful
Prattler
Presto
Primate
Prowler
Prosper
P. *bitches.*
Patience
Placid
Pliant
Precious
Priestess
Prudence
R. *dogs.*
Racer
Rambler
Random
Ranger
Ransack
Ranter
Rattler
Rector
Render
Rifler
Ringwood
Risker
Rockwood
Rouser
Rover
Rumbler
Rusher
R. *bitches.*
Racket
Rapid
Rattle
Ruin
Rummage
S. *dogs.*
Samson
Saunter
Scalper
Scamper
Scourer
Scramble
Scuffler
Sharper
Shifter
Singer
Skirmish
Smoker
Songster
Soundwell
Spanker
Spinner
Spoiler
Sportsman
Squabbler
Squeaker
Steady
Stickler
Stringer
Stripling
Striver
Stroker
Struggler
Sturdy
Sylvan
S. *bitches.*
Sappho
Skilful
Speedy
Spitfire
Sportful
Sprightly
Stately
Strumpet
Sybil
T. *dogs.*
Tackler
Tamer
Tangent
Tartar
Tattler
Taunter
Teaser
Terror
Thrasher

Thumper	Trueboy	Trollop
Thwacker	Trueman	Truelass
Tickler	Trusty	Tuneful
Tomboy	Tryall	V. *dogs.*
Topper	Tuner	Vagrant
Torrent	Twig'em	Valid
Touchstone	T. *bitches.*	Vaulter
Trampler	Tattle	Venture
Trimbush	Telltale	Vexer
Trimmer	Tempest	Victor
Trojan	Termagant	Vigorous
Trouncer	Testy	Viper
Truant	Trifle	Volant
Voucher	Wellbred	Wagtail
V. *bitches.*	Whynot	Wanton
Vanquish	Wildair	Warfare
Venomous	Wildman	Warlike
Vicious	Wilful	Waspish
Vivid	Woodman	Watchful
Vixen	Workman	Welcome
Vocal	Wrangler	Whimsey
W. *dogs.*	Wrestler	Wildfire
Warbler	W. *bitches.*	Wishful
Warrior	Waggery	Worry
Wayward	Waggish	Wrathful.

Brown—Whitaker—Beckford, &c.

HOUND, *v.* To set on the chase; to hunt, to pursue.

HOUR, *s.* The twenty-fourth part of a natural day; the space of sixty minutes.

HOURGLASS, *s.* A glass filled with sand, which, running through a narrow hole, marks the time.

HOUSE, *v.* To harbour, to admit to residence; to shelter, to keep under a roof; to take shelter, to keep the abode.

HOUSEDOG, *s.* A mastiff kept to guard the house.

HOUSING, *s.* Cloth originally used to keep off dirt, now added to saddles as ornamental.

HOWL, *v.* To cry as a wolf or dog; to utter cries in distress.

HOWL, *s.* The cry of a wolf or dog; the cry of a human being in horror.

HOY, *s.* A large boat, sometimes with one deck.

HUCHO, *s.* A fish of the genus Salmo.

The hucho is the most predatory fish of the salmo genus, and is made like an ill-fed trout, but longer and thicker. He has larger teeth, more spines in the pectoral fin, a thicker skin, a silvery belly, and dark spots only on the back and sides. I have never seen any on the fins. The ratio of his length to the girth is as eight to eighteen, or, in well-fed fish, as nine to twenty; and a fish, eighteen inches long by eight in girth, weighed 16,215 grains. Another, two feet long, eleven inches in girth, and three inches thick, weighed 4lbs. 2¼oz. Another, twenty-six inches long, weighed 5lbs. 5oz. Of the spines in the fins, the anal has nine, the caudal twenty, the ventral nine, the dorsal twelve, the pectoral seventeen: having numbered the spines in many, I give this as correct. The fleshy fin belonging to the genus is, I think, larger in this species than in any I have seen. Bloch, in his work on fishes, states, that there are black spots on all the fins, with the exception of the anal, as a character of this fish: and professor Wagner informs me, he has seen huchoes with this peculiarity; but, as I said before, I never saw any fish with spotted fins; yet, I have examined those of the Danube, Save, Drave, Mur, and Izar: perhaps, this is peculiar to some stream in Bavaria; yet the huchoes in the collection at Munich have it not. The hucho is found in most rivers tributary to the Danube—in the Save and Laybach rivers always; yet the general opinion is, that they run from the Danube twice a year, in spring and autumn. I can answer for their migration in spring, having caught several in April, in streams connected with the Save and Laybach rivers, which had evidently come from the still dead water into the clear running streams, for they had the winter leech, or louse, of the trout upon them; and I have seen them of all sizes in April in the market at Laybach, from six inches to two feet long; but they are found much larger, and reach thirty, or even forty pounds. It is the opinion of some naturalists that it is only a fresh-water fish; yet this I doubt, because it is never found beyond certain falls—as in the Traun, the Drave, and the Save; and, there can be no doubt, comes into these rivers from the Danube; and probably in its largest state, is a fish of the Black Sea. Yet it can winter in fresh water; and does not seem, like the salmon, obliged to haunt the sea, but falls back into the warmer waters of the great rivers; from which it migrates in spring, to seek a cooler tempera-

ture, and to breed. The fishermen at Gratz say they spawn in the Mur, between March and May. In those I have caught at Laybach, which, however, were small ones, the ova were not sufficiently developed to admit of their spawning that spring. Marsigli says that they spawn in the Danube in June. You have seen how violently they pursue their prey; I have never taken one without fish in his stomach; yet, when small, they will take a fly. In the Kleingraben, which is a feeder to the Laybach river, and where they are found of all sizes—from twenty pounds downwards—the little ones take a fly, but the large ones are too ravenous to care about so insignificant a morsel, and prey like the largest trout, often hunting in company, and chasing the small fish into the narrow and shallow streams, and then devouring them.

The hucho, as you have seen, preys with great violence, and pursues his object as a foxhound or a greyhound does. I have seen him in repose; they lie like pikes, perfectly still, and I have watched one for many minutes, that never moved at all. In this respect their habits resemble those of most carnivorous and predatory animals. It is probably in consequence of these habits, that they are so much infested by lice, or leeches, which I have seen so numerous in spring as almost to fill their gills, and interfere with their respiration, in which case they seek the most rapid and turbulent streams to free themselves from these enemies. They are very shy, and, after being hooked, avoid the baited line. I once saw the hucho, for which I was fishing, follow the small fish, and then the lead of the tackle; it seemed as if this had fixed his attention, and he never offered at the bait afterwards. I think a hucho that has been pricked by the hook becomes particularly cautious, and possesses, in this respect, the same character as the salmon. In summer, when they are found in the roughest and most violent currents, their fins (particularly the caudal fin) often appear worn and broken; at this season they are usually in constant motion against the stream, and are stopped by no cataract or dam, unless it be many feet in height, and quite inaccessible. In the middle of September, I have caught huchoes perfectly clean in rapid cool streams, tributary to the Laybach and the Save rivers; and, from the small development of their generative system at this time, I have no doubt that they spawn in spring. On the 13th of September, 1828, I caught, by spinning the small dead fish, three huchoes that had not a single leech upon their bodies, and they were the first fish of the kind I ever saw free from these parasites.

They migrate generally when the water is foul, and, except in the spring and autumn, do not so readily run at the bait. I was once nearly a month seeking for one in rivers in which they are found, between the end of June and that of July, without being able to succeed in even seeing one alive; and, as far as my information goes, the two places where there is most probability of taking them, are at Laybach and Ratisbon, in the tributary streams to the Save, and in the Danube; and the best time, in the first of these situations, is in March and April, and, in the second, in May. I am told, likewise, that the Izar, which runs by Munich, is a stream where they may be caught, when the water is clear: and I have seen in the fish market at Munich very large huchoes.

* * *

I am inclined to believe that the hucho is to be found in some of the mountain loughs in Connaught. Certainly I have seen fish of the salmo genus, taken in rivers communicating with deep lakes in the hills, which strikingly resemble the fish described by Sir Humphry.—*Salmonia—Editor.*

Hue, *s.* Colour, dye; a clamour, a legal pursuit.

Hulk, *s.* The body of a ship; anything bulky and unwieldy.

Humblebee, *s.* A buzzing wild bee; an herb.

Humour, *s.* Moisture; the different kinds of moisture in man's body. *Humours of the eye* are these—the *aqueous or watery*, which lies in the forepart of the globe; the *crystalline*, next to the *aqueous;* and the *vitreous or glassy* humour, which is larger than the rest, and fills the backward cavity of the eye.—*Crabbe.*

Hunt, *v.* To chase wild animals; to pursue, to follow close; to search for; to direct or manage hounds in the chase.

Hunting among the Britons is of great antiquity. Dio Nicæus, speaking of the inhabitants of the northern parts of this island, tells us, they were a fierce and barbarous people, who tilled no ground, but lived upon the depredations they committed in the southern districts, or upon the food they procured by hunting. Strabo also says, that the dogs bred in

Britain were highly esteemed upon the continent, on account of their excellent qualities or hunting; and these qualities, he seems to hint, were natural to them, and not the effect of tutorage by their foreign masters.

After the expulsion of the Danes, and during the short restoration of the Saxon monarchy, the sports of the field still maintained their ground. Edward the Confessor, whose disposition seems rather to have been suited to the cloister than to the throne, would join in no other secular amusements; but he took the greatest delight, says William of Malmsbury, "to follow a pack of swift hounds in pursuit of game, and to cheer them with his voice."

During the tyrannical government of William the Norman, and his two sons who succeeded him, the restrictions concerning the killing of game were increased. The privilege of hunting in the royal forests was confined to the king and his favourites; and, to render these receptacles for the beasts of the chase more capacious, or to make new ones, whole villages were depopulated, and places of divine worship overthrown.

King John was particularly attached to the sports of the field; and his partiality for fine horses, hounds, and hawks, is evident, from his frequently receiving such animals, by way of payment, instead of money, for the renewal of grants, fines, and forfeitures, belonging to the crown.

Edward III. took so much delight in hunting, that even at the time he was engaged in war with France, and resident in that country, he had with him in his army sixty couple of stag hounds, and as many hare hounds, and every day he amused himself with hunting or hawking.

James I. preferred the amusement of hunting to hawking or shooting. It is said of this monarch, that he divided his time betwixt his standish, his bottle, and his hunting; the last had his fair weather, the two former his dull and cloudy.

It would be a needless task, to quote the passages in the poetical and prose writings of the last three centuries, which prove that this favourite pastime has lost nothing of its relish in modern times, but, on the contrary, seems to be more generally practised.

* * *

If you have the whole country to yourself, and can hunt on either side of your house, as you please, never (when you can help it) fix your place of hunting till you see what the weather is.

Before a huntsman goes into the kennel to draft his hounds, let him determine within himself the number of hounds he intends to take out; as likewise the number of young hounds that he can venture in the country where he is going to hunt. Different countries may require different hounds: some may require more hounds than others. It is not an easy matter to draft hounds properly; nor can any expedition be made in it without some method.

When the place of meeting and time are fixed, every huntsman ought to be as exact to them as it is possible for him to be. On no account is he to be before the time; yet, on some occasions, it might be better, perhaps, for the diversion, were he permitted to be after it. The course your huntsman intends to take in drawing ought always to be well understood before he leaves the kennel.

If your huntsman, without inconvenience, can begin drawing at the farthest cover down the wind, and so draw from cover to cover up the wind till you find, let him do it.—*Vide* Cover.

While hounds are drawing for a fox, let your people place themselves in such a manner that he cannot go off unseen. I have known them lie in sheep's scrapes on the side of hills, and in small bushes, where huntsmen never think of looking for them; yet, when they hear a hound, they generally shift their quarters, and make for closer covers. Gentlemen should take this necessary part of fox-hunting on themselves, for the whipper-in has other business to attend to.

Huntsmen, whilst their hounds are drawing, or are at fault, frequently make so much noise themselves, that they can hear nothing else: they should always have an ear to a halloo. I once saw an extraordinary instance of the want of it in my own huntsman, who was making so much noise with his hounds, which were then at fault, that a man hallooed a long while before he heard him; and when he did hear him, so little did he know whence the halloo came, that he rode a couple of miles the wrong way, and lost the fox.

Though a huntsman ought to be as silent as possible at going into a cover, he cannot be too noisy at coming out of it again; and if at any time he should turn back suddenly, let him give as much notice of it as he can to his hounds, or he will leave many of them behind him; and should he turn down the wind, he may see no more of them.

There are times when hounds should be helped, and at all times they must be kept forward: hounds will naturally tire on a cold scent, when stopped by sheep, or other impediments; and when they are no longer able to get forward, will oftentimes hunt the old scent back again, if they find that they can hunt no other. It is the judicious encouraging of hounds to hunt when they cannot run, and the preventing them from losing time by hunting too much when they might run, that distinguishes a good sportsman from a bad one. Hounds that have been well taught will cast forward to a hedge of their own accord;

but you may assure yourself this excellence is never acquired by such as are left entirely to themselves.

Though I like to see fox-hounds cast wide and forward, and dislike to see them pick a cold scent through flocks of sheep to no purpose, yet I must beg leave to observe, that I dislike still more to see that unaccountable hurry which huntsmen will sometimes put themselves into the moment their hounds are at fault. Time ought always to be allowed them to make their own cast; and if a huntsman is judicious, he will take that opportunity to consider what part he himself has next to act; but instead of this, I have seen hounds hurried away the very instant they came to a fault, a wide cast made, and the hounds at last brought back again to the very place from whence they were so abruptly taken, and where, if the huntsman had had a minute's patience, they would have hit off the scent themselves.

When your huntsman makes a cast, I hope he makes it perfect one way before he tries another, as much time is lost by going backwards and forwards. You will see huntsmen, when a forward cast does not succeed, come slowly back again: they should return as fast as they can.

In large covers, if there are many roads, in bad scenting days, when these roads are dry, or after a thaw, when they carry, it is necessary your huntsman should be near to his hounds to help them, and hold them forward. Foxes will run the roads at these times, and hounds cannot always own the scent. When they are at fault on a dry road, let not your huntsman turn back too soon; let him not stop till he can be certain that the fox is not gone on. The hounds should try on both sides the road at once: if he perceives that they try on one side only, on his return let him try the other.

If a fox runs up the wind when first found, and afterwards turns, he seldom, if ever, turns again. This observation may not only be of use to your huntsman in his cast, but may be of use to you, if you should lose the hounds.

When you are pursuing a fox over a country, the scent being bad, and the fox a long way before, without ever having been pressed, if his point should be for strong earths that are open, or for large covers, where game is in plenty, it may be acting wisely to take off the hounds at the first fault they come to; for the fox will go many miles to your one, and probably will run you out of all scent; but if he should not, you will be likely to change at the first cover you come into: when a fox has been hard pressed, it is my opinion, that he never should be given up.

A perfect knowledge of his country certainly is a great help to a huntsman: if yours, as yet, has it not, great allowance ought to be made.

In a country where there are large earths, a fox that knows the country, and tries any of them, seldom fails to try the rest. A huntsman may take advantage of this; they are certain casts, and may help him to get nearer to his fox.

Great caution is necessary when a fox runs into a village: if he is hallooed there, get forward as fast as you can. Foxes, when tired, will lie down anywhere, and are often lost by it. A wide cast is not the best to recover a tired fox with tired hounds: they should hunt him out, inch by inch, though they are ever so long about it.

A huntsman must take care, where foxes are in plenty, that he does not run the heel; for it frequently happens that hounds can run the wrong way of the scent better than they can the right, when one is up the wind, and the other down.

When a huntsman hears a halloo, and has five or six couple of hounds along with him, the pack not running, let him get forward with those which he has: when they are on the scent, the others will soon join them.

Let him lift his tail hounds, and get them forward after the rest: it can do no hurt. But let him be cautious how he lifts any hounds to get them forward before the rest: it always is dangerous, and foxes are sometimes lost by it.

When hounds are hunting a cold scent, and point towards a cover, let a whipper-in get forward to the opposite side of it. Should the fox break before the hounds reach the cover, stop them, and get them nearer to him.

When a fox persists in running in a strong cover, lies down often behind the hounds, and they are slack in hunting him, let the huntsman get into the cover to them: it may make the fox break; it may keep him off his toil; or may prevent the hounds from giving him up.

It is not often that slow huntsmen kill many foxes: they are a check upon their hounds, which seldom kill a fox but with a high scent, when it is out of their power to prevent it. Activity is the first requisite in a huntsman to a pack of fox-hounds: a want of it no judgment can make amends for; but the most difficult of all his undertakings is the distinguishing betwixt different scents, and knowing with any certainty the scent of his hunted fox. Much speculation is here required; the length of time hounds remain at fault; difference of ground; change of weather; all these contribute to increase the difficulty, and require a nicety of judgment, and a precision, much above the comprehension of most huntsmen.

When hounds are at fault, and cannot make it out of themselves, let the first cast be

quick; the scent is then good, nor are the hounds likely to go over it: as the scent gets worse, the cast should be slower, and be more cautiously made. This is an essential part of hunting, and which, I am sorry to say, few huntsmen attend to. I wish they would remember the following rules, viz.: that, with a good scent, their cast should be quick; with a bad scent, slow; and that, when the hounds are picking along a cold scent, they are not to cast them at all.

When hounds are making a good and regular cast, trying for the scent as they go, suffer not your huntsman to say a word to them: it cannot do any good, and probably may make them go over the scent.

When hounds come to a check, a huntsman should observe the tail hounds: they are least likely to over-run the scent, and he may see by them how far they brought it. In most packs there are some hounds that will show the point of the fox, and, if attended to, will direct his cast. When such hounds follow unwillingly, he may be certain the rest of the pack are running without a scent.

Different countries require different casts: such huntsmen as have been used to a woodland and inclosed country, I have seen lose time in an open country, where wide casts are always necessary.

When you want to cast round a flock of sheep, the whipper-in ought to drive them the other way, lest they should keep running on before you.

Most huntsmen like to have all their hounds turned after them, when they make a cast: I wonder not at them for it, but I am always sorry when I see it done; for till I find a huntsman that is infallible, I shall continue to think the more my hounds spread the better: as long as they are within sight or hearing, it is sufficient. Many a time have I seen an obstinate hound hit off the scent, when an obstinate huntsman, by casting the wrong way, has done all in his power to prevent it. Two foxes I remember to have seen killed in one day by skirting hounds, whilst the huntsman was making his cast the contrary way.

When your hounds are divided into many parts, you had better go off with the first fox that breaks. The ground will soon get tainted, nor will hounds like a cover where they are often changing.

The heading a fox back at first, if the cover be not a large one, is oftentimes of service to hounds, as he will not stop, and cannot go off unseen. When a fox has been hard run, I have known it turn out otherwise; and hounds that would easily have killed him out of the cover, have left him in it.

When a fox has been often headed back on one side of a cover, and a huntsman knows there is not any body on the other side to halloo him, the first fault his hounds come to, let him cast that way, lest the fox should be gone off; and if he is in the cover, he may still recover him.

Suffer not your huntsman to take out a lame hound. If any are tender-footed, he will tell you, perhaps, that they will not mind it when they are out: probably they may not; but how will they be on the next day? A hound, not in condition to run, cannot be of much service to the pack; and taking him out at that time may occasion him a long confinement afterwards. Put it not to the trial.

All hounds go fast enough with a good scent; but it is the particular excellence of a fox-hound, when rightly managed, to get on faster with an indifferent scent than any other hound, and it is the business of a huntsman to encourage this. Every minute you lose is precious, and increases your difficulties; and while you are standing still the fox is running miles.

When hounds flag from frequent changes and a long day, it is necessary for a huntsman to animate them as much as he can: he must keep them forward, and press them on; for it is not likely, in this case, that they should over-run the scent: at these times the whole work is generally done by a few hounds, and he should keep close to them.

The many chances that are against you in fox-hunting; the changing frequently; the heading of the foxes; their being coursed by sheep-dogs; long faults; cold hunting, and the dying away of the scent; make it necessary to keep always as near to the fox as you can; which should be the first and invariable principle of fox-hunting. Long days do great hurt to a pack of fox-hounds. I set out one day last winter from the kennel at half-past seven, and returned home a quarter before eight at night, the hounds running hard the greatest part of the time. The huntsman killed one horse and tired another, and the hounds did not recover it for more than a week.

* * *

The whole system of hunting is so revolutionised that the preparation which a horse now requires is very different to what it was in former times. The hour of meeting is seldom before eleven: the find generally quick and certain; and horses are often not more than five or six hours from their stables after the best day's sport; and the ground they go over is frequently not so much as a plating race horse performs in contending three or four-mile heats. Having said this, I see no reason to doubt the propriety of feeding, sweating, and muzzling the hunter much in the same manner as the race horse, only making due and proper allowance for the relative nature of their work; particularly as to not

stripping the hunter too much of his flesh; or losing sight of the natural difference between the thorough-bred horse and the cock-tail.

* * *

There is certainly no country in the world where the sport of hunting on horseback is carried to such a height as in Great Britain at the present day, and where the pleasures of a fox-chase are so well understood, and conducted on such purely scientific principles. It is considered the *beau ideal* of hunting by those who pursue it. There can be no doubt that it is infinitely superior to stag-hunting, for the real sportsman can only enjoy that chase when the deer is sought for, and found like other game which are pursued with hounds. In the case of finding an outlying fallow-deer, which is unharboured in this manner, great sport is frequently afforded; but this is rarely to be met with in Britain. So that fox-hunting is now the chief amusement of the true British sportsman; and a noble one it is: the artifices and dexterity employed by this lively, crafty animal, to avoid the dogs, are worthy of our admiration, as he exhibits more devices for self-preservation than any other beast of the chase.

In many parts of this and the sister island, hare-hunting is much followed, but fox-hunters consider it as a sport only fit for women and old men. But although it is less arduous than that of the fox-chase, there are charms attached to it which compensate for the hard riding of the other.

* * *

The hunting match given by the Prince Esterhazy, Regent of Hungary, upon the signing the treaty of peace with France, was a day's sport, that bids fair to vie in point of blood (if the King of Naples' slaughter be excepted) with any of those recorded in modern history, as there were killed, 160 deer, 100 wild boars, 300 hares, and 80 foxes. The king had a larger extent and a longer period for the exercise of his talents, and it is proved that during his journey to Vienna, in Austria, Bohemia, and Moravia, he killed five bears, 1820 boars, 1950 deer, 1145 does, 1625 roebucks, 1121 rabbits, 13 wolves, 17 badgers, 16,354 hares, and 354 foxes; the monarch had likewise the pleasure of doing a little in the bird way, by killing upon the same expedition, 15,350 pheasants, and 12,335 partridges.

* * *

Anecdotes of Hunting.—The late Duke of Grafton, when hunting, was thrown into a ditch; at the same time a young curate, calling out "Lie still, my lord," leaped over him, and pursued his sport. Such an apparent want of feeling, we may presume, was properly resented. No such thing: on being helped out by his attendant, his grace said, "That man shall have the first good living that falls to my disposal; had he stopped to have taken care of me, I never would have given him any thing;" being delighted with an ardour similar to his own, or with a spirit that would not stoop to flatter.

* * *

"In this pursuit I (Colonel Thornton) sunk more than once, into a quagmire, where the prince's whipper-in some years since, was hesitating whether he should go to the assistance of some hounds which had got an old stag at bay, but on his master's asking if he were afraid, he immediately dashed in and sunk to rise no more. It is indeed reported, that neither himself nor his horse were ever found.

* * *

One of the sons of Gosden, whose father was celebrated as the bold rider of Datchett, was out upon his favourite poney with the king's stag hounds; he came to a part where the prescut D——of C—r—d, was refusing a leap, when the bolder son of Nimrod, without thinking of the importance and rank of the person he was addressing, exclaimed, "Stand away, and let me take it, a pretty sort of a duke you are."

* * *

He (the huntsman) died, some time since, at Duffry-hall, the seat of Cæsar Colclough, Esq. at the advanced age of ninety-six, near sixty years of which he passed in the Colclough family. He acted in the triple capacity of huntsman, steward, and master of the family. During the rebellion in 1798, he and his family acted with uncommon fidelity to their employers, as one of his sons, when Mr. C. was obliged to fly, came down to protect the house and property, and he never quitted his post. Another of his sons brought off horses and clothes to his master, at the risk of his life, when he was informed where to find him, and during that period the old man buried a large quantity of the family plate, which he afterwards conveyed to a place of safety.

Until the last year of his life he regularly went out with the hounds, and his voice retained its clearness and sweetness. He was well known to all sportsmen in that part of Ireland.

* * *

The celebrated Saunderson, professor of mathematics, at Cambridge, who was entirely destitute of sight, continued to hunt until a very advanced stage of life; his horse was accustomed to follow that of his servant, and the satisfaction of Saunderson was extreme when he heard the cry of hounds and the huntsmen, and which he used to express with all the cagerness of those who, possessing their eye-sight, could consequently be more gratified by the incidents of the chase.—*Strutt—Beckford—Brown—Thornton—&c. &c.*

HUNT, *s.* A pack of hounds; a chase; pursuit.

HUNTER, *s.* One who chases animals for pastime; a dog that scents game or beasts of prey; a horse employed in hunting.

To obtain a useful hunter, let the person purchase a well-bred mare, not so much regarding her size as her points of action—particularly requiring that she have a sound constitution and good legs. Let him send her to a horse of good form, *with freedom of action* and a sound constitution; also being particular as to the state of his legs and feet. Never let him breed from a naturally infirm horse, whose legs have shown more than ordinary weakness; and, above all, let him fix upon one which has what the veterinary profession call a short canon; that is, the bone extending from the knee to the fetlock, commonly called the shank bone. Let him begin to breed from his mare before she is much injured by work; as in that case, if she does not breed to please him with her first and second foal, he can dispose of her and purchase another.

A very celebrated fox-hunter has observed, that "the goodness of the horse generally goes in at the mouth." Let the breeder, then, bear this in mind, and take care that the foal be dropped early, and the dam well fed for the first two months with bran mashes, carrots, &c., till the spring grass arrives. If the mare should prove a good nurse, the colt will not require corn till he is weaned, which on no account should be delayed beyond the first or second week in September. Here the grand mistake has arisen, to which we are indebted for such numbers of mis-shapen horses as this country abounds in. Farmers, in general, never think of weaning their colts till after Michaelmas, long before which period there is little or no virtue in grass, but, on the contrary, it is sour and unwholesome.

From weaning time to the following May, the colt should be well kept on a full allowance of sweet hay, with at least two good feeds of oats per day, and *he should be kept warm.* He should have a head collar on, with a small strap hanging down to his knees, which will admit of his being handled every day; and every two months his toes should be rasped, and his heels opened a little with the drawing knife. In March or April he should have two mild doses of physic, which will cause him to grow; and when the weather is warm he should be turned out into a good upland pasture for the summer, with plenty of shade and water, but taken up every month to have his legs examined and his toes rasped. The second week in September he should be housed again for the winter, when his belly should be the measure for his corn. When docked, his tail should be left eight inches in length, which will preclude the disagreeable necessity of having the operation repeated.

Early in the following spring, when turned two years old, he should be broken, but not backed; and physicked as before directed. In the first or second week in June he should be cut; and when recovered he should be turned out for the summer. When taken up again for the winter, he should have two mild doses of physic, and be very well kept, giving him a few carrots, or a large bran mash once a week. Very early in the spring he should have a little more very mild physic; and in a fortnight afterwards he should be backed, and taught his paces by a person who understands his business. Idleness, from this time forth, will be an enemy to him; and as soon as he is perfect in his paces, he should do what in the training stables is called "a little work." Exercise will strengthen his legs, enlarge his muscles, improve his form, and make him grow. From this time forth he should be treated as a horse in every respect but in his work, which should be moderate till the fifth year; but previously to that time a customer will always be ready for him, and if his owner is disposed to part with him, his average price will be from one to two hundred sovereigns.

When I say a colt should be treated as a horse after the third year, I mean, of course, that he should be treated after the system I have laid down for hunters, and not allowed his summer's run at grass. Hard meat will make him powerful and handsome: grass will render him, comparatively speaking, heavy, pot-bellied, and shapeless.

I omitted to mention one very essential part of the education of a colt designed for a hunter. His action—particularly that of his shoulders—will be greatly benefited by riding him up and down hill, and trotting him gently in deep ground. He should also be taught to leap at three years old. If there should be the least appearance of a curb, the iron should at once be applied.

* * *

The hunter should be taken up certainly not later than the twentieth of July. Soon after this period the nights begin to get chilly, and his coat would receive a check if exposed to them. It would lose that soft, silky feel, which it generally has if the horse is in perfect health previously to that time. When first taken to house he should be kept as cool as possible, and, if it can be avoided, there should not be more than one horse in every other stall, be the stable ever so large. As his bowels will be relaxed by the grass he has

been eating, his physic should be milder than usual; but that must depend upon previous knowledge of the constitution of the horse. Generally speaking, five drachms and a half would be sufficient, if well prepared by bran mashes beforehand. I do not approve of strong physic; because it is useless to give it, when mild, with proper preparation, will do what is required of it; but it is not in the power of a drachm or two of *good* aloes to destroy a horse.

By the time he is ready for his second dose, he will be in some measure reconciled to the change of temperature—from the open air to that of a confined stable—and a little more caution is necessary during the operation of it. Unless the weather happens to be very warm, he should have a hood on him if he goes out early in the morning, and, at all events, one warm body cloth, or his coat may receive a check which it will not recover for some time. If he has had his first dose, a day or two after he was taken up—say the 20th of July—allowing seven clear days between the *setting* of each dose, he will be through it all by about the 17th of August, up to which time, and for a week afterwards, he should have nothing but gentle walking and trotting exercise, of about an hour and a half at a time, before heat of the day; and by no means should a brush be laid upon him, as it opens the pores of his skin, and renders him more susceptible of cold. Indeed, all the grooming he requires at this time is to have his legs well rubbed—particularly with the hand—three or four times a day, and oftener if the circulation be languid, and his body well wisped with a good solid *hay* wisp, a little damped. Should a horse have had some physic at grass in the summer, or *late* in the spring, before he was turned out, and not appear foul, it may be better to stop a fortnight or three weeks between his second and third dose: and, if a bit of soft ground can be found, to give him a little work in the time. If his two other doses did not work him hard, it will be advisable to add half a drachm of aloes to the third dose, as it will take more to move his bowels now than it did before he got the hard meat into him, and had a little work.

The condition of a horse must proceed by slow degrees: it is the work of time; and it is in vain to expect it on any other terms than as the result of a long course of preparation, followed by severe work. In a clear fortnight after he has had his last dose of physic, he should begin to do some work; for without it no progress can be made. This, however, should be gradual; and for the first month should consist of long protracted exercise, rather than what is called "good work." He should be kept out of his stable for three or four hours in the course of the day; and if ridden gently across a country, and now and then with a pack of harriers (weather permitting), it will greatly promote his condition, by hardening his flesh, increasing his strength, and improving his wind. At this time the use of alteratives is indispensable. By their mild and gradual impression a healthy action of the bowels is obtained, and thereby what in stable language is called "fog," (but which might more properly be termed debility, or depression of strength,) is got rid of, and the general appearance and condition of the animal much improved. Indeed, without the use of alterative medicines—exclusively of physic—no hunter can be got into blooming condition; that is to say, to look well in his skin, to dry immediately after a sweat, and to be in full vigour of body. Of these medicines there are several sorts in use; but the diuretic and diaphoretic are in my opinion the best. It is almost needless to observe, that the latter act upon the skin: but as sensible perspiration in the horse is not to be obtained by medicine without difficulty, and having recourse to larger doses than may be safe or convenient for him to take when at work, and it is insensible perspiration that we wish to obtain, these alteratives should be combined; for it is from their gradual and almost imperceptible operation that we are to look for the effect we wish to produce. Antimony forms the principal diaphoretic; and from its weight a sufficient quantity—one ounce divided into four parts—may be given him every day in his corn for eight days together; but this should be given when the weather is warm, or danger from catching cold may arise, from the pores of the skin being relaxed. With proper precautions, however, none is to be apprehended, and the effect on the general health and appearance of the horse is striking. If the diaphoretic alterative, in the quantity above stated, be not given before the horse begins to work, and the weather becomes cold and wet, it is better to combine it with the diuretic, by giving him a very mild urine ball twice a week, for three weeks in succession, with half an ounce of antimony, finely levigated, in each ball. These medicines combined will check that excitement of the general habit which always accompanies a transition from rest to work, purify the blood, and give tone and vigour to the system. Nitre has been much used by grooms as a cooling diuretic, and a preventive of disease from such causes; but it must be borne in mind that nitre is a strong repellant, and of a debilitating nature.

All this, however, without a good stable, and good stable mangement, is of no avail.

Speaking next of feeding, Nimrod says:—Formerly wheat was given to race horses, as more nourishing than oats; but now the

latter form the chief food for all descriptions of horses. Beans, however, have for some time been allowed to hunters, and when given with discretion are most beneficial. Two single handfuls in each feed of corn is the allowance for a hunter who is fed (as he ought to be) five times a day.

About eight pounds a-day of hay, or one truss a-week, is considered sufficient for a hunter that will eat five feeds of corn per day. A larger quantity is found to increase the size, consequently the weight of the carcase, to injure the wind, and destroy the digestive powers. If one handful of good hay be found in his rack, he should have no more till next stable time, when his appetite will be sharp. If given to eat his straw, the setting muzzle, in this case, must be made use of.

Hunters are not always to be fed alike: allowance should be made for the distance to covert; for when a horse has to go twelve or fourteen miles in a morning to meet hounds, he may be allowed a little more hay overnight, than if he had but four or five, as he will empty his stomach on the road, and there is reason to expect a long day. As to whether a hunter should have any water on the morning of hunting, that is a point not so much considered as it ought to be, for we should be guided by his constitution. If he is apt to scour, and throw off his meat on the road, I should recommend his having none; but if, on the other hand, he holds his meat well in him, has some distance to go, and is not called on till ten or eleven o'clock in the day, he should have six or eight swallows, or godowns, as the grooms call them, between five and six in the morning. This quantity of water, or more, is always given to the race horse on the day he runs his race, as it makes him enjoy his food, and digest it afterwards, and it is all absorbed by the time he is called upon to run. Nothing is so apt to make horses scour as change of food and water; for which reason it is advisable that a hunter should go from his own stable to meet hounds, if the distance does not exceed fifteen or sixteen miles, rather than sleep out, and be subject to the effects alluded to. If, however, he does sleep out, and is affected by the change, he should be watered before he leaves home, and have very little where he sleeps, which will in some measure counteract the evil.

Speaking of stable management, Nimrod says:—As no man can make good work without good tools, so no servant can do his duty by a stud of hunters without proper materials to go to work with. He must have a good stable, some loose boxes, and a good saddle-room with fire-place: he must have lots of horse-clothes of all descriptions, bandages, hot water, gruel, lancets, tweezers, and a few drugs—the very best old hay and corn, good exercising ground, and, above all, plenty of strength in his stable; for there are two ways of dressing a horse—one to warm him, and the other to starve him. Dressing a horse vigorously removes obstructions in the smaller vessels, promotes the circulation of the blood, and in bad weather is a substitute for exercise.

With regard to a horse coming round after a hard day, even supposing him to be in the hands of the best of grooms, that must, in some measure, depend on the stuff he is made of; but, generally speaking, he should come out about the sixth day after the severest run. If his legs have received no injury, he should come out three times in a fortnight, at least during the open weather; and he will be the better for being out twice a week if there have been no tiring days. Some horses require much more work than others; but none of them can go the pace, and continue it over a country, unless they are in strong work.

General rules cannot be individually applied; but there is one respecting a hunter which I have held inviolable; and that is, that, under all circumstances, whether the intervals between his hunting have been long or short, he should have a sweat, and go for a mile nearly at the top of his speed on the day before hunting. I have generally adopted the following plan:—

Let some heavy clothes be put on him, and, with a light weight on his back, let him go at a gentle rate six or eight times around a large field that rides a little deep, till he sweats kindly. Let him be followed to the place by a man with some dry clothes and a scraper, and, taking him into some building, or under a warm hedge, let him be well scraped, and have on his dry clothes. Then, if short of work, let him have a good gallop for a mile, and walk home. This treatment, with proper care, is unattended with any danger of catching cold, and, if followed by a proper allowance of hay and water, will give him a wonderful advantage over those horses which have not been doing what he has done, provided he drop into a quick thing with the hounds the next day. I have seen hunters led to be sweated by a boy riding a hack; but however great an advocate I may be for preserving horses' legs by keeping weight off them as much as possible, yet a horse cannot, in my opinion, be worthy the name of a hunter if he cannot carry a boy in his exercise.

Having laid some stress upon the words, proper allowance of hay and water on the day before hunting, I will proceed to state what I consider that allowance to be. In the first place, if a horse will eat his corn in the morning without water, he should have none till he comes in from exercise, and is done up, which should be by ten o'clock at farthest.

He should then have half a pail of water, and a proportion of his hay, which should not exceed, for a moderately-sized horse, ten pounds a day. He should then be shut up till four, when, before he is dressed over, he should have another half pail of water, and no more until he returns from hunting the next day, unless it be a few swallows on the morning he hunts, when his groom first comes to him. If this quantity of hay is not sufficient to satisfy his appetite, and there is an appearance in the morning of straw in the manger, as if he had been eating it, the setting-muzzle should be put on him at ten o'clock, and should remain on him for the night, but his groom should be with him by five in the morning, to relieve him. He should then have his two feeds, at an interval of an hour, and proceed to the covert at a gentle pace. If, when there, provided he have been treated in the way I have prescribed, he cannot carry his rider as he ought to do, we must conclude nature forbids it, as he will have had every assistance from art.

* * *

When I first began to keep hunters, we knew nothing of those great restoratives in the stable—flannel bandages, hot water for the legs, and gruel. Except in case of illness they were never thought of. An old writer on farriery, the Sieur la Fosse, speaks of "the great advantage of keeping horses' legs warm, as preventing glanders and other accidents;" but it is only within these few years that bandages have been applied as part of the clothing of a hunter; the benefit of which is, in my opinion, incalculable. By their use circulation is kept up in those parts where it is apt to be most languid; and the practice of washing legs in very warm water, and swathing them in large folds of flannel, takes off soreness and inflammation from blows and other injuries, which all hunters are liable to in a run over a strong country. Another advantage attending them is, that they admit of a horse being shut up in half the time it formerly required to clean him, which enables him to lie down, or roll, which he will always do if in a loose house, before he gets stiff from his work.

There is a cleanliness in not letting a hunter be taken into his stable until the rough dirt which hangs about him is removed; for which purpose he should be taken under a shed or into another stable; and the quickest method of removing it is by the means of a birch-broom. Three minutes will accomplish this. He should then be taken into his own stable, have two or three quarts of tepid gruel, and his feet and legs above his knees and houghs should be well washed in water nearly hot. When sponged well with strained sponges, one set of bandages should be swathed around them. His head and body should be well dried, which, if he is full of hard meat, will not occupy more than an hour, when he should be shut up in a loose house, well littered down, and a small feed of corn allowed him. In about two hours his groom should come to him again; his bandages should be taken off, his legs well wisped and hand-rubbed, his head and body lightly brushed over, and a dry set of bandages put on. A lukewarm mash, with a feed of oats in it, and three parts of a pail of tepid water, with a very small quantity of hay, will make him comfortable for the night; and on the following morning he should go to exercise as soon as it is light, and be walked for an hour with an extra cloth and a hood. He should have tepid water all that day, and a liberal allowance of it, with his usual oats if he will eat them, but no beans. If his appetite fails him, and does not return before shutting-up time that evening, he should have half a cordial and half a diuretic-ball mixed together; which, with a liberal allowance of tepid water, and an hour and a half walking exercise on the third day, will so far recover him as to enable him to return to his former high feed on the fourth; on the fifth or sixth have a sweat; and on the seventh be fit for business again (as far, at least, as his constitution is concerned) after the hardest day, and will carry his rider with more ease to himself than if he had not gone through it.—*Nimrod.*

Huntinghorn, *s.* A bugle, a horn used to cheer the hounds.

Huntress, *s.* A woman that follows the chase; a mare used in hunting.

Huntsman, *s.* One who delights in the chase; the servant whose office it is to manage the chase.

It is the opinion of a great sportsman, that it is as difficult to find a perfect huntsman as a good prime minister. Without taking upon me to determine what requisites may be necessary to form a good prime minister, I will describe some of those which are essentially necessary towards making a perfect huntsman; qualities which, I will venture to say, would not disgrace more brilliant situations:—such as a clear head, nice observation, quick apprehension, undaunted courage, strength of constitution, activity of body, a good ear, and a good voice.—*Beckford.*

HUNTSMANSHIP, *s.* The qualifications of a hunter.

HURL, *v.* To throw with violence; to play at a kind of game.

HURL, *s.* Tumult, riot; a kind of game; the bat used in hurling.

HURLER, *s.* One that plays at hurling.

Hurling is the national game of Ireland, and much practised in the southern and western counties. It differs from cricket in its being a mere contest between the opposing parties, as to which shall force the ball between barriers placed at some distance from each other. The ball is thrice the size of a cricket-ball, the hurl differently shaped, and the game of a wilder and less methodical character, as it affords a liberty for each individual to exert himself as he pleases. Hence the "melée" of a hurling-match has rather the appearance of hostile encounter than rustic sport, and is therefore better adapted to the rude and martial people who practise it, than the more scientific but less exciting game of cricket.

HUSK, *s.* The outmost integument of some sorts of fruit.

HYBRID, *s.* Any animal whose sire is of one kind and dam of another.

HYBRIDOUS, *a.* Begotten between animals of different species; produced from plants of different kinds.

HYDROPHOBIA, *s.* Dread of water; a malady destructive to the human and canine races.

Hydrophobia in medicine is a disease generally communicated to man by the bite of a rabid dog, and is so called because one of its principal symptoms is the inability of the patient to swallow water or any other liquid. It is called by some writers canine madness, and seldom makes its appearance till a considerable time after the bite of the rabid animal. In some few instances it has commenced in seven or eight days from the accident, but generally the patient continues in health for twenty, thirty, or forty days, or even much longer. The bite will in general be healed long before that time, frequently with the greatest ease, though sometimes it resists all kinds of healing applications, and forms a running ulcer, which discharges a quantity of matter for many days. The approach of the disease is known by the cicatrix of the wound becoming high, hard, and elevated, and by a peculiar sense of prickling at the part; pains shoot from it towards the throat; sometimes it is surrounded with livid or red streaks, and seems to be in a state of inflammation; though often there is nothing remarkable to be observed. The patient becomes melancholy, loves solitude, and feels sickness at the stomach. Sometimes the peculiar symptoms, the dread of water, comes on all at once; sometimes the disease begins like a common sore throat, and the soreness daily increasing, the hydrophobic symptoms appear like a convulsive spasm of the muscles of the fauces. In others the mind is first affected, and a real dread of water arises before the patient tries whether he can swallow it. But in whatever manner this symptom comes on, the most painful sensations accompany every attempt to swallow liquids. Nay, the bare sight of water, or any thing clear, will give the utmost uneasiness, or even throw the patient into convulsions. The patient, however, is not as yet deprived of reason; some have, merely by the dint of resolution, conquered the dread of water, though they never could overcome the convulsive motions which the contact of liquids occasioned: and yet this has been of no avail; for the convulsions and other symptoms increasing have always overpowered the individual at last, and a great flow of viscid saliva into the mouth now takes place, and it has the same effect upon the fauces that other liquids have. This therefore is blown off with violence, which in a patient of Doctor Fothergill's occasioned a noise like the barking of a dog. Patients then have an insatiable thirst, but are unable to get down any drink without the utmost difficulty, though sometimes they can swallow bread soaked in liquids, slices of oranges, or other fruits. There is a pain under the scrobiculus cordis, as in the tetanus. But the symptoms are so various, that they cannot be enumerated, for we seldom read two cases of hydrophobia which do not differ very remarkably. Sometimes every member is convulsed by fits, but most violently from the navel up to the breast and œsophagus. The fit comes on perhaps every quarter of an hour; the fauces are not red, nor the tongue dry; the pulse is not at all feverish; and, when the fit is over, nearly like a sound pulse. The face grows pale, then brown, and during the fits almost black, the lips livid; the head is drowsy, and the ears tingling; the urine limpid. At last the patient is weary, the fits are less violent, the pulse becomes weak, intermittent, and not very quick; and at last the whole body becomes cold. If the patient

can get sleep, so he will expire. The blood drawn before death appears good in every respect. The hydrophobia seems to be a symptom peculiar to the human race; for the mad animals which communicate the infection do not seem to have any dread of water. If the disease once exhibits its symptoms in a human patient, the chances for recovery are small indeed; there having never been one well authenticated case of the recovery of a really hydrophobous person. Prevention is the only chance, and removal of the contagious matter the only fair hope of preserving life. Of all the means of removal, the cutting out the part to which the tooth had been applied is unquestionably the most effectual. This therefore should not be delayed; one quarter of an hour's hesitation will sometimes prove fatal. But besides cutting away the part, careful washing may be used. Cold water should be poured upon the wound from a considerable height, that the matter may be washed away with some force. Even after removal by the knife, careful washing is still proper. And after both these, to prevent, as far as can be, the possibility of any contagious matter lurking about the wounded part, it should not be allowed to heal, but a discharge of matter should be supported for several weeks by ointment with cantharides, or similar applications; by these means there is the best chance of removing the matter at a sufficiently early period. Prevention may also be obtained by the destruction of the contagious matter at the part; and where there is the least reason to think that a complete removal has not been obtained, these should always be had recourse to. With this intention the actual cautery, and burning with gunpowder, have been employed; and fire is doubtless one of the most powerful agents that can be used for this purpose. Recourse has also been had to washing, both with acids and alkalies. Of the former vinegar has been chiefly used, but more may be expected from the latter, particularly from the caustic alkali, so far diluted that it can be applied with safety; for from its influence as a solvent of animal mucus, it gives a better chance of a complete removal of the poison.

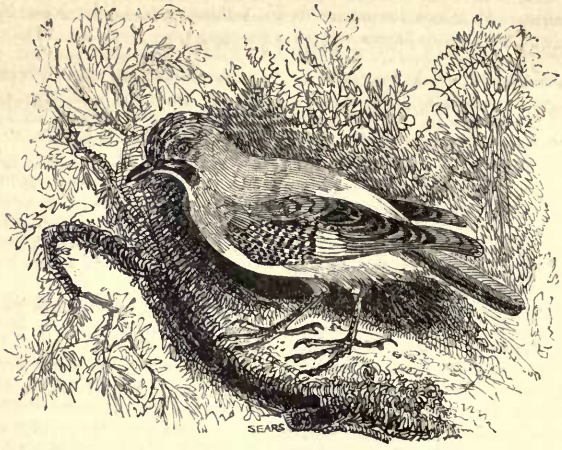
* * *

The injured part must be destroyed, or be cut out. Destroying it is the most safe and certain, and the best applications for that purpose are the lapis infernalis and the butter of antimony. These are preferable to a hot iron, which the ancients used, because a hot iron forms a crust that acts as a defence to the under parts instead of destroying them. The lapis infernalis is much better than any other caustic, as it melts and penetrates during its application. The bitten part must be destroyed to the bottom, and where there is any doubt that the bottom of the wound is not sufficiently reached, butter of antimony should be introduced occasionally as deep as possible, and incisions should be made, if necessary, to lay open every part to the influence of the caustic. In desperate cases incisions should be made round the wound to prevent the virus from spreading. The wound is to be dressed for some time with poultices, to assuage the inflammation caused by the caustics, and afterwards with acrid dressings and hot digestives, to create a discharge and drain the injured parts.

* * *

It is my practice, and I recommend it to others when called to patients bitten by a mad dog, to try them immediately, and from time to time, with water, slopping it first into a pewter pot, and from thence back to the basin a few times, in order to detect as early as possible the hydrophobia, or first decided symptom produced by the poison of a mad dog. * * *

An Italian surgeon of the hospital at Moscow, being in the Ukraine in 1813, was requested to give assistance to fifteen persons, who had received the bite of a mad dog. A deputation of elders waited upon him, and entreated him to administer help to the unfortunate persons through a peasant, who, during several years, had acquired great reputation for curing hydrophobia. M. Marochetti consented upon certain conditions. The country doctor then administered to fourteen of the persons confided to him in a peculiar way. The fifteenth, a young girl of fifteen, was treated in the ordinary manner, for the purpose of proving the effect of both modes of treatment. To each of the fourteen he gave daily one pound and a half of the decoction of the buds of yellow broom flowers, and he examined twice a day under the tongue the place where, according to his statement, little swellings were formed containing the virus of madness. These swellings rose on the third or ninth day, and were seen by M. Marochetti. Very soon after they appeared, they were touched with a red hot needle, after which the patient gargled the part with the decoction of broom. The result of this treatment was that the fourteen patients were cured in six weeks, whilst the young girl, treated differently, died on the seventh day in the convulsions of madness. Three years after M. Marochetti paid a visit to the fourteen persons, and they were all doing well. The same physician being at Padolia, in 1818, had a new opportunity of confirming this interesting discovery. The happy result of this mode of treatment was the same with twenty-six persons, who had all been bit by a mad dog.—*Gazette de Santé—Gilman—Darw—Marochetti.*



THE JAY.

JACK, *s.* The diminutive of John; an instrument to pull off boots; an engine which turns the spit; a young pike; a cup of waxed leather; a small bowl thrown out for a mark to the bowlers; the male of some animals; a support to saw wood on; the colours or ensign of a ship.

JACKDAW, (*Corvus monedula*, LINN.: *Le Choucas*, BUFF.) *s.* A small species of crow.

This bird is considerably less than the rook, only thirteen inches in length, and about twenty-eight in breadth. Its bill is black, eyes white; the hinder part of the head and neck are of a hoary grey colour; the rest of the plumage is of a fine glossy black above; beneath it has a dusky hue; the legs are black.

The daw is very common in England, and remains with us the whole year: in other countries, as in France and various parts of Germany, it is migratory. They frequent churches, old towers, and ruins, in great flocks, where they build their nests: the female lays five or six eggs, paler than those of the crow, and smaller; they rarely build in trees; in Hampshire they sometimes breed in the rabbit burrows. They are easily tamed, and may be taught to pronounce several words; they will conceal part of their food, and with it small pieces of money, or toys. They feed on insects, grain, fruit, and small pieces of flesh; and are said to be fond of partridges, eggs.

There is a variety of the daw found in Switzerland, having a white collar round its neck. In Norway, and other cold countries, they have been seen perfectly white.

Bewick.

JACKET, *s.* A short coat; a close waistcoat.

JACKSNIPE. *Vide* JUDCOCK.

JACOBINE, *s.* A pigeon with a high tuft.

JACOBUS, *s.* A gold coin of James I., current at 20*s.*, 23*s.*, and 25*s.*—*Crabbe.*

JACULATION, *s.* The act of throwing missile weapons.

JADE, *v.* To tire, to harass, to dispirit, to weary.

JALAP, *s.* A purgative root. It is the root of a West Indian plant of the convolvulus kind, is black on the outside, and reddish within, with resinous veins. It takes its name from Xalapa, a town in New Spain. Its constituent parts are chiefly resin and starch.

JAMAICA PEPPER or ALLSPICE, *s.* A good carminative and cordial, given in doses from half an ounce to an ounce, in flatulency of the stomach and bowels, and used as an ingredient in cordial medicines.

The following tincture is strongly recommended by Mr. Bracey Clark, as a remedy for flatulent colic, gripes, &c.:—

Jamaica pepper . 1 lb.
Proof spirit . . 6 pints.—Mix.

Let the allspice be powdered, and mixed with the spirit; the bottle to be well corked and frequently shaken. In two or three weeks the tincture will be fit for use. The dose about four ounces diluted with water, and repeated every hour until the horse is relieved.—*White.*

JAMES'S POWDER, *s.* A powder composed chiefly of antimony.

James's Powder is composed chiefly of antimony, and similar to that which is sold in the shops by the name of Antimonial Powder. As a horse medicine, the latter is as useful and efficacious as James's Powder. It is an excellent medicine in fevers of every kind; and, though usually given in the small dose of a scruple, or half-a-drachm, may be exhibited with perfect safety, and better effect in a much larger quantity. White says, he never gave less than two drachms, and sometimes three; and has seen even one ounce given at a dose without the least inconvenience. It appears to act on the skin like tartar emetic, promoting insensible perspiration; its effect is not so certain. It is sometimes joined with opium, camphor, nitre, or ginger, according to the nature of the disease: with ginger it is prescribed for horses that are hide-bound; but this compound is not proper in fevers, or any complaint arising from inflammation. It is most commonly given with nitre and camphor; and some practitioners prefer it, as a fever medicine, to tartar (emetic).—*White.*

JAPAN, *v.* To varnish, to embellish with gold and raised figures; to black shoes.

JAR, *v.* To strike together with a kind of short rattle; to strike or sound untuneably.

JAUNDICE, *s.* A distemper from obstructions of the glands of the liver.

A peculiar yellowness of the membranes of the eyes and mouth sometimes attends certain disorders, which have on that account been named yellows, or jaundice. Those disorders consist in great heaviness of the head, a peculiar languor and disinclination to motion, yellowness, or a yellowish redness of the inner surface of the eyelids, while little or no dung is voided, and that little has mucus or slime on its surface; the urine is scanty, and high-coloured; in short there is great torpor in all the organs of the body. This disorder generally happens towards autumn, or the latter part of summer, and may be caused, in some measure, by the heat of the weather, as well as by feeding immoderately, especially upon hay, when it happens to be remarkably good and sweet, such hay always tempting a horse to eat immoderately: but it is produced by immoderate feeding upon any kind of hay, or even of corn. By this excess of food, assisted by the heat of the weather, the stomach is weakened, and the bowels become torpid; the large bowels are in consequence loaded with excrement, and the mesenteric veins with blood. Hence the liver also becomes loaded with blood, and performs its office imperfectly; the bile therefore seems to be forced back upon the circulation, or re-absorbed, and thus the blood and all the secretions are tinged of a yellow colour. The high colour of the membrane of the eye is caused by the determination of blood to the head, when the blood is forced into vessels which in health convey only a colourless and transparent fluid; and as the whole mass of blood is loaded with bile, it appears in those minute vessels of a yellow colour: and generally that yellowness in the membranes

under the eyelids approaches towards redness, or the colour of an orange. Bleeding is the first remedy in this disorder; nor should blood be taken off in small quantities at a time, from a fear of increasing the animal's apparent weakness, which depends more upon the brain being oppressed with blood than any thing else, but in a full quantity, that is, to the extent of from one to two gallons, or until the horse becomes faint. The bowels should then be unloaded by means of clysters and a purgative ball.

Jaw, *s.* The bone of the mouth in which the teeth are fixed; the mouth.

Jay, (*Corvus glandarius*, Linn.; *Le Geai*, Buff.) *s.* A bird.

This beautiful bird is not more than thirteen inches in length. Its bill is black, eyes white; the feathers on the forehead are white, streaked with black, and form a tuft which it can erect and depress at pleasure; the chin is white, and from the corners of the bill on each side proceeds a broad streak of black, which passes under the eye; the hinder part of the head, the neck, and the back, are of a light cinnamon colour; the breast is of the same colour, but lighter; lesser wing coverts bay; the belly and vent almost white; the greater wing coverts are elegantly barred with black, fine pale blue and white alternately; the greater quills are black, with pale edges, the bases of some of them white; lesser quills black; those next the body, chestnut; the rump is white; tail black, with pale brown edges; legs dirty pale brown.

The jay is a very common bird in Great Britain, and is found in various parts of Europe. It is distinguished as well for the beautiful arrangement of its colours, as for its harsh grating voice, and restless disposition. Upon seeing the sportsman, it gives by its cries the alarm of danger, and thereby defeats his aim and disappoints him. The jay builds in woods, and makes an artless nest, composed of sticks, fibres, and tender twigs; the female lays five or six eggs, of a greyish ash colour, mixed with green, and faintly spotted with brown. Mr. Pennant observes, that the young ones continue with their parents till the following spring, when they separate to form new pairs. Birds of this species live on acorns, nuts, seeds, and various kinds of fruits; they will eat eggs, and sometimes destroy young birds in the absence of the old ones. When kept in a domestic state they may be rendered very familiar, and will imitate a variety of words and sounds. We have heard one imitate the sound made by the action of a saw so exactly, that though it was on a Sunday, we could hardly be persuaded that the person who kept it, had not a carpenter at work in the house. Another, at the approach of cattle, had learned to hound a cur dog upon them, by whistling and calling upon him by his name: at last, during a severe frost, the dog was, by that means, excited to attack a cow big with calf, when the poor animal fell on the ice, and was much hurt: the jay was complained of as a nuisance, and its owner was obliged to destroy it.—*Bewick.*

Ichthyology, *s.* The doctrine of the nature of fish.

Jennet, *s.* A Spanish horse.

Jerk, *s.* A smart quick lash; a sudden spring; a quick jolt that shocks or starts.

Jesses, *s.* Slips of light leather, seven or eight inches long, and a quarter of an inch wide, made fast to each of the hawk's legs. These are to be secured to a small swivel, fixed to the end of a thong of leather, three or four feet long, called a leash, so as easily to be detached from the swivel when the hawk is required to fly. The jesses are seldom removed from the bird's legs when once they have been put on.

Jet, *s.* A very beautiful fossil of a fine deep black colour; a spout or shoot of water.

Jetty, *a.* Made of jet; black as jet.

Ignite, *v.* To kindle, to set on fire.

Ignition, *s.* The act of kindling, or of setting on fire.

Ignitible, *a.* Inflammable, capable of being set on fire.

Jigot, *s.* A leg; as, a jigot of mutton.

Jill, *s.* A measure of liquids.

Iliac, *a.* Relating to the lower bowels.

Imbrown, *v.* To make brown, to darken.

Imping, *s.*

This curious process consists in attaching to the part that remains an exact substitute for the piece lost. For this purpose the falconer is always provided with pinions, (right and left,) and with tail-feathers of hawks, or with the feathers separated from the pinion, carefully preserved and numbered, so as to prevent mistake in taking a true match for the injured feather. He then with a sharp knife gently parts the web of the feather to be repaired, at its thickest part, and cuts the shaft obliquely forward, so as not to damage the web on the opposite edge. He next cuts the substitute feather as exactly as possible at the corresponding point, and with the same slope.

For the purpose of uniting them, he is provided with an iron needle, with broad triangular points at both ends; and after wetting the needle with salt and water, he thrusts it into the centre of the pith of each part, as truly straight, and as nearly to the same length in each as may be. When this operation has been skilfully performed, the junction is so neat that an inexperienced eye would hardly discern the point of union; and as the iron rusts, from having been wetted with brine, there is little or no danger of separation.—*Sebright.*

Imposthume, *s.* A collection of purulent matter in a bag or cyst.

Inbred, *a.* Produced within; hatched or generated within.

Incage, *v.* To coop up, to shut up; to confine in a cage, or any narrow space.

Inch, *s.* The twelfth part of a foot.

Incision, *s.* A cut, a wound made with a sharp instrument.

Incisor, *s.* Cutter, tooth in the forepart of the mouth.

Incorporate, *v.* To mingle different ingredients so as they shall make one mass; to unite, to associate, to embody.

Incubation, *s.* The act of sitting upon eggs to hatch them.

Incubation.—It is probable birds are endowed with an instinctive power of regulating the necessary heat for this purpose; of course, should the heat of the air, together with the natural warmth of the body, on the close contact of the bird to the eggs, be too great, her feelings would dictate the necessity of leaving them for a time to cool. At the early period of incubation birds quit their eggs more frequently than at the time the fœtus is more perfect. Yet, in the advanced state, the embryo young is not in more danger of being destroyed, if so much; for we have frequently found a living fœtus in an egg that has been taken from the nest two days. If, however, the young is within a few hours of being excluded, and the egg is suffered to be some time cold, it either dies, or becomes so weak as not to be able to extricate itself from the shell. Various degrees of heat will enlarge the embryo young, but regular heat seems necessary to its production; and yet artificial heat, regulated by the brooding of a bird, will not produce young with such certainty. In Egypt, a vast quantity of eggs are hatched by artificial heat in stoves. It is probable, however, one third or one fourth miscarry. The necessary heat for this purpose is about ninety-six degrees of Fahrenheit's thermometer, or thirty-two of Reaumur's scale. Birds frequently turn and change the situation of their eggs in the nest; besides this, it is possible that the moisture of the bird's body may assist the natural growth of the fœtus and the production of the young.

The male birds of some species supply the place of the female on the nest; but then it is of short duration, and rarely, if ever, when the eggs are near hatching; at that time the female is frequently fed by the male. This is not common to all species, but very conspicuous in the rook, the pigeon, and many others. Many species of birds possess a reservoir for food, called a craw, or crop; this seems to answer the same purpose as the first stomach in ruminating animals. Here it is the food is softened and prepared for the stomach; from this reservoir it is by some ejected for the purpose of feeding their young; conspicuous in the pigeon.

The rook has a small pouch under the tongue, in which it carries food to its young. It is probable the use of the craw may be extended further than is generally imagined; for besides the common preparation of the food to assist its digestion in the stomach, there are some species that actually secrete a lacteal substance in the breeding season, which, mixing with the half-digested food, is ejected to feed and nourish the young. The mammæ, from which this milky liquor is produced, are situated on each side the upper part of the breast, immediately under the craw. In the female turtle dove we have met with these glands tumid with milky secretion, and we believe it common to both sexes of the dove genus. The cormorant or pelican genus possess no craw; but, to supply its place, they have a loose skin at the base of the under mandibles, capable of great distension, in which they carry fish to their young. The bustard is said to possess a bag of an astonishing size, for the purpose of retaining water; but the most unaccountable and extraordinary formation in the trachea of many of the males of the duck genus, called a labyrinth, is beyond our reach to discover the use of, as well as the singular flexure in the windpipe of the hooping swan and crane. * *

Attention during Incubation.—There is this distinction in the hen: in some, the desire of sitting or incubation is predominant, which they will repeat to the fifth or sixth time in the year, to their emaciation or almost destruction: in others the desire is so slight, that they will probably sit but twice, or even once in the season, and then not steadily. It is for the skilful breeder to take advantage of this variation of quality, the one kind furnishing plenty of eggs for the other to sit upon.

It is proper to place corn and water beside the sitting hen, whenever it may appear necessary, withdrawing them as soon as she is satisfied, not only to encourage steadiness of incubation, but to support the constitutions of those in which the natural excitement is so powerful, that they will remain several successive days upon the nest, at the risk of famishing. I have had instances of hens of this description fainting outright, and appearing as dead, on their finally leaving the nest with the chickens, in a state of total emaciation, having, probably, not eaten or drank more than once in three or four days, during the term of their incubation, twenty-one days. The plan of feeding on the nest should be invariably pursued with all frequent sitters.—*Montagu—Moubray.*

Incurable, *a.* Not admitting remedy, not to be removed by medicine; irremediable, hopeless.

Indian Rubber, or Caoutchouc, *s.* An elastic gum procured from a South American tree, called the Syphonia Uastica. It is mostly brought into Europe in the shape of bottles, which are formed by spreading the gum over moulds of clay.

Indigo, *s.* A plant, by the Americans called anil, used in dyeing for a blue colour.

Infect, *v.* To act upon by contagion; to fill with something hurtfully contagious. Infection, *s.* Contagion, mischief by communication.

Inflame, *v.* To kindle, to set on fire; to heat the body morbidly with obstructed matter; to fire with passion.

Inflammation, *s.* The act of setting on flame; the heat of any morbid part occasioned by obstruction.

Inflammation is a disorder of the blood-vessels, depending upon their having too much blood in them, or upon that blood being impure and acrimonious, or upon the blood vessels themselves being in a diseased state.

Cool air is always of service in inflammatory diseases, and cold air is sometimes still better; even turning the horse out, if the weather is dry, is perhaps the best situation of any. Inflammation may be general or local. General inflammation is fever, of which there is but one kind in the horse, and that may almost always be cured by early and copious bleeding.—*White.*

Inflammatory, *a.* Having the power of inflaming.

Infusion, *s.* The act of pouring in, instillation; the act of steeping any thing in moisture without boiling; the liquor made by infusion.

INJECTION, *s.* The act of casting in; any medicine made to be injected by a syringe, or other instrument, into any part of the body.

INNINGS, *s.* Lands recovered from the sea; term in cricket.

INOCULATION, *s.* The practice of transplanting the small-pox, by infusion of the matter from ripened pustules into the veins of the uninfected.

INSECT, *s.* Insects are so called from a separation in the middle of their bodies, whereby they are cut into two parts, which are joined together by a small ligature, as we see in wasps and common flies.

INSNARE, *v.* To entrap, to catch in a trap, gin, or snare.

INSTINCT, *s.* The power which determines the will of brutes; a desire or aversion in the mind, not determined by reason or deliberation.

They who write on natural history cannot too frequently advert to instinct, that wonderful limited faculty, which, in some instances, raises the brute creation as it were above reason, and in others leaves them so far below it.

It has been remarked that every species of bird has a mode of nidification peculiar to itself; so that a schoolboy would at once pronounce on the sort of nest before him. This is the case among fields and woods and wilds; but, in the villages round London, where mosses and gossamer, and cotton from vegetables, are hardly to be found, the nest of the chaffinch has not that elegant, finished appearance, nor is it so beautifully studded with lichens, as in a more rural district; and the wren is obliged to construct its house with straws and dry grasses, which do not give it that rotundity and compactness so remarkable in the edifices of that little architect. Again, the regular nest of the house martin is hemispheric; but where a rafter, or a joist, or a cornice, may happen to stand in the way, the nest is so contrived as to conform to the obstruction, and becomes flat, or oval, or compressed.

In the following instances instinct is perfectly uniform and consistent. There are three creatures, the squirrel, the field-mouse, and the bird called the nuthatch (*Sitta Europæa*) which live much on hazel-nuts; and yet they open them each in a different way. The first, after rasping off the small end, splits the shell in two with his long fore-teeth, as a man does with his knife; the second nibbles a hole with his teeth, as regular as if drilled with a wimble, and yet so small that one would wonder how the kernel can be extracted through it: while the last picks an irregular ragged hole with its bill: but as this artist has no paws to hold the nut firm while he pierces it, like an adroit workman, he fixes it, as it were, in a vice, in some cleft of a tree, or in some crevice; when, standing over it, he perforates the stubborn shell. We have often placed nuts in the chink of a gate-post where nuthatches have been known to haunt, and have always found that those birds have readily penetrated them. While at work they make a rapping noise that may be heard at a considerable distance.

It is no doubt exceedingly difficult, and perhaps impossible, to define where instinct ends, and reason begins, in animals. But that some of them are endowed with a faculty which does not come under the usual notion of instinct, by whatever other name we may choose to call it, will, I think, hardly allow of a dispute. This, as it strikes me, appears in the different degrees of intelligence which we are accustomed to recognize as elevating one species of animal above another,—as the half-reasoning elephant for instance, and the friend of man, the dog, above numberless others. Now, instinct of one tribe, one would think, as much as in another, must be full and perfect, and would not admit of our considering the degree of intelligence manifested in one species as higher or lower than that possessed by another. Again: much more must we conceive that the proper instinct of any species will be fully, and therefore equally, possessed by all individuals of that species. How, then, upon the notion of mere instinct, shall we account for that superiority of intelligence, which is found in one individual, to others of the same species, and which is familiar to those who are employed about, or in any way in the habit of conversing with, animals? But the observation which appears to me most decidedly to carry the faculties of animals to something exceeding the measure and character of instinct, is that of the new and ingenious contrivances to which they will often have recourse in situations, and upon occasions, much too accidental and peculiar to admit of our imagining that they could have been contemplated and provided against in the regular instinct of the whole species. This we should naturally be disposed to conceive must have been given to regulate the ordinary habits of the animals, and adapted to those exigencies of their mode of life which are continually

occurring, not to such as do rarely, and might, one would be tempted to say, never occur. A few instances will, perhaps, better explain what I mean, and carry more persuasion than my argument.

I was one day feeding the poor elephant (who was so barbarously put to death at Exeter 'Change) with potatoes, which he took out of my hand. One of them, a round one, fell on the floor, just out of the reach of his proboscis. He leaned against his wooden bar, put out his trunk, and could just touch the potato, but could not pick it up. After several ineffectual efforts, he at last blew the potato against the opposite wall with sufficient force to make it rebound, and he then, without difficulty, secured it. Now it is quite clear, I think, that instinct never taught the elephant to procure his food in this manner; and it must, therefore, have been reason, or some intellectual faculty, which enabled him to be so good a judge of cause and effect. Indeed, the reflecting power of some animals is quite extraordinary. I had a dog who was much attached to me, and who, in consequence of his having been tied up on a Sunday morning, to prevent his accompanying me to church, would conceal himself in good time on that day, and I was sure to find him either at the entrance of the church, or, if he could get in, under the place where I usually sat.

A gentleman, a good shot, lent a favourite old pointer to a friend who had not much to accuse himself of in the slaughter of partridges, however much he might have frightened them. After ineffectually firing at some birds which the old pointer had found for him, the dog turned away in apparent disgust, went home, and never could be persuaded to accompany the same person afterwards.

I have been often much delighted with watching the manner in which some of the old bucks in Bushy Park contrive to get the berries from the fine thorn-trees there. They will raise themselves on their hind legs, give a spring, entangle their horns in the lower branches of the tree, give them one or two shakes, which make some of the berries fall, and they will then quietly pick them up.—*White's Selborne—Jesse.*

INSULAR, *a.* Belonging to an island.

INTERMEW, *s.* The change of a hawk's colour from red to white the second year.

INTESTINA, *s.* An order in the Linnæan system of the class Vermes, including earthworms and leeches.—*Crabbe.*

INTESTINES, *s.* The guts, the bowels.

JOCKEY, *s.* A person that rides horses in the race; a man that deals in horses.

JOCKEY, *v.* To jostle by riding against one; to cheat, to trick; to ride; to ride unfairly.

JOINT, *s.* Articulation of limbs, juncture of moveable bones in animal bodies; hinge; a knot in a plant. Out of joint, luxated, slipped from the socket, or corresponding part where it naturally moves.

JOURNEY, *s.* The travel of a day; travel by land.

IPECACUANHA, *s.* An Indian plant.

Ipecacuanha is sometimes employed as an expectorant in chronic cough and asthmatic affections, and I believe with good effect when joined with squills, ammoniacum, &c.—*White.*

IRIS, *s.* The rainbow; the circle round the pupil of the eye, which is striped and variegated.

Hanging from the upper edge of the pupil of the horse, are found two or three round black bodies, as large as millet seeds. When the horse is suddenly brought into an intense light, and the pupil is closed, these bodies present a singular appearance, being squeezed out from between the edges of the iris. An equal number, but much smaller, are attached to the edge of the lower portion of the iris. Their general use is probably to intercept portions of light which would be troublesome or injurious; but their principal function is accomplished during the act of grazing. They are larger on the upper edge of the iris, and are placed on the outer side of the pupil, evidently to obstruct the light in those directions in which it would come with greatest force, both from above and even from below, while

at the same time, the field of view is perfectly open, so far as it regards the pasture on which the horse is grazing.

The colour of the iris is, in some unknown way, connected with this black point behind. Wall-eyed horses, whose iris is white, have no uvea.—*The Horse.*

Irish Horse, *s.*

In some of the rich grazing counties, as Meath and Roscommon, a large long blood horse is reared of considerable value, but he seldom has the elegance of the English horse; he is larger headed, more leggy, ragged-hipped, angular, yet with great power in the quarters, much depth beneath the knee, stout and hardy, full of fire and courage, and the best leaper in the world.

The Irish horse is generally smaller than the English. He is stinted in his growth, for the poverty and custom of the country have imposed upon him much hard work, at a time when he is unfit for labour of any kind. For this reason, too, the Irish horse is deficient in speed. There is, however, another explanation of this. The Irish thorough-bred horse is not equal to the English. He is comparatively a weedy, leggy, worthless animal, and very little of him enters into the composition of the hunter or the hackney.

For leaping, the Irish horse is unrivalled. It is not, however, the leaping of the English horse, striding as it were over a low fence, and stretched at his full length over a higher one; it is the proper jump of the deer, beautiful to look at, difficult to sit, and, both in height and extent, unequalled by the English horse.

Iron, *s.* A hard, fusile, malleable metal.

Iron is found in every part of the globe, in the soil, in the water, and as a constituent of vegetable and animal bodies. The preparations of iron, used in medicine, are, 1st, sulphate of iron, or salt of steel; 2d, muriate of iron; 3d, subcarbonate of iron; 4th, tartarised iron; 5th, red oxide of iron, or colcothar of vitriol; 6th, rust of iron; and, 7th, scales of iron. They are all powerful tonics in the human body, but not often given to horses. The dose of No. 1, is from 1 drachm to 3. No. 2, 1 drachm to 2 or 3. No. 3, 2 drachms to 4. No. 4, 3 drachms to 5. No. 5, 4 drachms to 6. No. 6, 2 drams to 4. No. 7, 2 drams to 4, finely powdered. Preparations of iron are generally mixed with aromatics, and sometimes with soda. Metallic preparations should be used with great caution. Iron is the most innocent, and possessed of considerable tonic power; but, before it is employed, wholesome food, moderate exercise, and good grooming, should have a fair trial.

Iron, *a.* Made of iron; resembling iron in colour; hard, impenetrable.

Ironwood, *s.* A kind of wood extremely hard, and so ponderous as to sink in water.

Isinglass, *s.* A fine kind of glue made from the intestines of a large fish resembling a sturgeon. It is chiefly made from dried sounds of codfish.

Island, *s.* A tract of land surrounded by water.

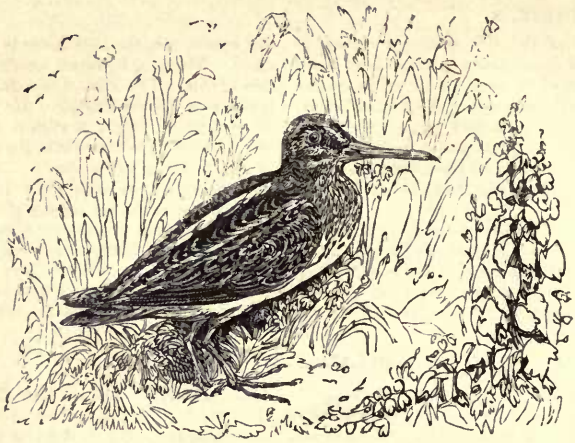
Issue, *s.* The act of passing out; termination; a vent made in a muscle for the discharge of humours; evacuation; progeny, offspring.

Itch, *s.* A cutaneous disease extremely contagious; the sensation of uneasiness in the skin which is eased by rubbing; a constant teasing desire. Itch is supposed to be caused by a small insect of the acarus tribe. On microscopic examination it appears to be white with red legs, and will be found in the small pellucid vesicles which are observable on the parts infected.

Itch, *v.* To feel that uneasiness in the skin which is removed by rubbing; to long.

Itchy, *a.* Infected with the itch.

Judcock, Jacksnipe, Gid or Jetcock, (*Scolopax gallinula*, Linn.; *La Petite Becassine*, Buff.) *s.* A bird.



The judcock, in its figure and plumage, nearly resembles the common snipe; but it is only about half its weight, seldom exceeding two ounces, or measuring more, from the tip of its beak to the end of its tail, than eight inches and a half: the bill is black at the tip, and light towards the base, and rather more than an inch and a half in length. A black streak divides the head lengthwise from the base of the bill to the nape of the neck, and another, of a yellowish colour, passes over each eye to the hinder part of the head: in the midst of this, above the eye, is a narrow black stripe running parallel with the top of the head from the crown to the nape. The neck is white, spotted with brown and pale red. The scapulars and tertials are very long and beautiful; on their exterior edges they are bordered with a stripe of yellow, and the inner webs are streaked and marked with bright rust colour on a deep brown, or rather bronze ground, reflecting in different lights a shining purple or green. The quills are dusky. The rump is of a glossy violet or bluish purple; the belly and vent white. The tail consists of twelve pointed feathers of a dark brown, edged with rust colour; the legs are of a dirty or dull green.

The judcock is of nearly the same character as the snipe, it feeds upon the same kinds of food, lives and breeds in the same swamps and marshes, and conceals itself from the sportsman with as great circumspection, among the rushes or tufts of coarse grass. It, however, differs in this particular, that it seldom rises from its lurking place until it is almost trampled upon, and, when flushed, does not fly to so great a distance. It is as much esteemed as the snipe, and is cooked in the same manner.

The eggs are not bigger than those of a lark; in other respects they are very like those of the snipe.—*Bewick.*

Jugular, *a.* Belonging to the throat.

Jugulares, *s.* That order of fishes, according to Linnæus, which have the ventral fins placed before the pectoral, as cod, haddock, and whiting.

THE KESTREL.

KALENDAR, *s.* An account of time.

KAW, *v.* To cry as a raven, crow, or rook.

KAYLE, *s.* Ninepins; nine holes.

KEEN, *a.* Sharp, well edged: severe, piercing; eager, vehement; acrimonious; bitter of mind.

KEG, *s.* A small barrel, commonly used for a fish barrel.

KELL, *s.* The omentum, that which inwraps the guts.

KENNEL, *s.* A cot for dogs; a number of dogs kept in a kennel; the hole of a fox, or other beast; the water-course of a stream.

Kennel.—Is the place where hounds are kept; upon the judicious construction of which, their health, safety, and preservation, are known greatly to depend. Those who take to, or become possessed of, kennels ready built, frequently continue them in the form they fall into their hands; but such as encounter the expense of new erections, cannot do better than take a previous survey of the most approved plans; amongst which the Duke of Bedford's at Woburn Abbey; the Duke of Richmond's at Goodwood, in Sussex; and Sir William Rawley's at Tendring Hall, Suffolk, are supposed, for extent and convenience, to take the lead of most others in the kingdom. Taste and fashion may go a great way in the external glare of such establishments; but health and convenience should always prove the most predominant considerations. It is universally admitted, by all who have a practical knowledge of this subject, that in large and regularly hunted packs, two kennels are indispensably necessary to the success and well doing of the whole. When there is but one, it can in the winter season be but seldom cleaned; and even then the hounds are in a comfortless state, from the dampness of the situation so long as it remains. Cleanliness is so essen-

tially necessary in every apartment and department of a kennel, that no continuance of health in the hounds, or excellence in the field, can be expected without it. They are individually innately clean; and will never, if they can avoid it, dung near where they lie. Air, fresh straw, and ample room for the occasional expansion of their weary limbs, are requisite for the invigoration of the frame, and the preservation of health. Hounds confined in a body are more liable to disease than the same animal single, and in a state of unrestrained liberty; hence the necessity for counteraction, by every means the most prudent precaution can adopt. Hounds thus subject to, and constantly attacked with disease, and even madness, under the best and most judicious management, must be evidently much more so if surrounded with filth and nastiness.

That some idea may be formed of the grandeur of the buildings, and the liberal scale, of the most celebrated hunting establishments, it is only necessary to introduce a few explanatory remarks upon the kennels of eminence already mentioned. The superb edifice of the Duke of Richmond is said (and probably with great truth) to have cost £10,000, in its erection; to which his Grace contributed no small proportion of personal assistance. He is reported to have been his own architect and builder; to have dug his own flints, burnt his own lime, made his own bricks, and framed the woodwork in his own shops. The dog kennel, abstracted from all other buildings, stands alone, in such part of the park as to form a grand and striking object from the principal rooms of the mansion; the materials are flints, finished at all the angles by a light grey-brick, like the Lymington white stock.

The distribution of the building is into five compartments: two of them thirty-six feet by fifteen, and three more thirty by fifteen; these are called kennels, to which are annexed two feeding rooms, twenty-eight by fifteen. In each of these are openings at top, for the admission of external air when necessary, and stoves to qualify the air when too cold. There are supplies of water, and drains into a tank a considerable depth below, full of rain water, from the surface of which to the rise of the arch is eleven feet, so that no inconvenience arises from smell, and the whole can be occasionally cleared off by drains to more dependent depths and dung pits, where it becomes contributory to the purposes of agriculture. Round the whole building is a pavement five feet wide; airing yards, places for breeding, and other conveniences, making a part of each wing. To constitute a uniformity of elegance, neatness, and perfection, the huntsman and whipper-in have each a parlour, kitchen, and sleeping-room, appropriated to their own particular purpose.

The Duke of Bedford's is an immense establishment, upon a scale of too much extent for particular description, as it includes tennis court, riding-house, &c., &c., in one stone-fronted building, of 266 feet in length, with two wings of stables, containing stalls for thirty-six hunters; and eleven loose houses for horses sick and lame. As the dog kennel, however, is the only part entitled to notice under this head, it will create no surprise that the richest subject should possess the most complete in England.

It is in length 405 feet, having the boiling house in the centre, with feeding rooms adjoining, and a granary behind. On the right of the centre are apartments for two kennel-keepers, two long lodging rooms for the hunting hounds, with flues running along the wall to preserve an equal temperature in the severity of the winter season; spacious yards to each, furnished with a fountain in the middle, for the dogs to drink at; and water-cocks fixed at proper distances to cleanse the pavement when it may be required; adjoining to these are seven hospitals for sick and lame hounds, with yards to each. On the left are divisions for litter, straw, &c.; eleven apartments for bitches and puppies, with yards to each; eleven ditto for bitches in pup, with yards also; and a large division for bitches at heat. In the front is a large reservoir of water, which supplies the fountains and different cocks in the several yards within. Behind the whole is a large airing-ground, flesh-house, and all requisite conveniences. The huntsman's dwelling-house is a handsome building adjoining. The number of hunting hounds kept in the kennel are usually from sixty to seventy couple.

The kennel of Sir William Rawley is by no means equal to the external grandeur of the two already described, but replete with every internal convenience that an establishment upon a somewhat smaller scale can possibly require. It is situate about half a mile from the family mansion, from the garden of which it constitutes a picturesque appearance. It is erected in a valley of the park, a spot well adapted to the purpose, being equally defended from the cutting easterly winds, and the heat of the sun in its meridian, by a thick skirting of the park and forest trees. Not having the advantage of a rivulet to the water courts, that want is amply supplied by a pump which, by means of different cocks, turns the water to every part of the premises, consisting of the hunting kennel, or principal lodging-room, which is twenty feet by eighteen in the clear, eighteen feet high, and paved with flagstones. The beds or benches which cover almost the whole area, are of original and most admirable contrivance, being lathed like some bedsteads, and are made to fold up with joints, for the convenience of washing the

floor beneath them. This room, by means of a flue of a peculiar construction, is heated to any required temperature; and the hounds after severe chases and in wet weather are rendered dry and comfortable in a much less time than they could be by any other means.

There is also a kennel or lodging room for the young hounds, of the same dimensions as the former, and possessing the same conveniences except the flue, which here would have been superfluous. Several small kennels for bitches in a state of gestation, as well as a proportional number for those with puppies; a paved court to the hunting kennel; a feeding house, one-half of which is open, the other under cover; a paved court to the kennel for the young hounds; a pump and a stone water cistern; a large grass yard for airing the hounds belonging to the hunting kennel, containing about an acre and three-quarters, in which are a variety of lime, chestnut, and other trees, forming an excellent shade for the hounds during the summer season; the young hounds have a similar convenience. To these are annexed twelve small kennels for puppies, well constructed for the purpose. The hunting hounds generally consist of about thirty-six couple, and the establishment is conducted in such a style of punctuality, order, and excellence, that it is universally acknowledged equal to any and inferior to none upon a similar scale, from one extremity of the kingdom to the other.

Next to the choice of a proper spot for, and a judicious as well as a convenient structure of the kennel, the management of the hounds, when there, becomes a matter of serious consideration, and requires a feeder of strict sobriety, indefatigable industry, invariable punctuality, great humanity, personal fidelity to his employer, and a constant attention to the business in which he is engaged, as upon him in a great degree depends the health and preservation of the hounds. Mr. Beckford observes (in great proof of his practical knowlenge and personal experience) that no part of the hunting establishment goes on so well as when the master becomes an occasional superintendent of his own concerns. He says, as the sport in the field depends on the exquisite sense of smelling so peculiar to the hound, so care should be taken to preserve it, and cleanliness is the surest means. The keeping of the kennel sweet and clean, cannot therefore be too strongly inculcated and impressed upon the mind of the feeder; if he seems habitually disposed to deviate from which, he is not at all calculated for the office he has undertaken.

The preparation for feeding, as boiling the meat, mixing the meal, and getting it ready at the hours agreed on, is a matter that the huntsman will of course take care (on his part) never to have neglected; but there are other considerations equally important, which become entitled to attention. Hounds cannot be properly fed by a single person; two are (for a variety of reasons) unavoidably necessary, and those two should be the feeder and the huntsman, as hounds should be drafted and fed according to their state of flesh and condition. Some are much more voracious than others, and will require a greater portion of food; others look and work well with half the quantity. The eye of the huntsman should discriminate between the opposite descriptions; in want of which attention the pack will never be of equal appearance. When any of the hounds are observed to be low in flesh, off their appetites, bad feeders, or kept under by the old and master hounds, it will be a matter of advantage to draft them, and let them feed under less restraint. Young and impatient feeders fall into the very common fault of feeding hounds with their meat too hot; it is both a prevalent and injurious error that should be totally abolished.

Mr. Beckford is of opinion, that hounds poorer than the rest should be fed again, and that they cannot be fed too often; as well as that those hounds which become too fat, if any, should be drafted off, and not permitted to fill themselves. All hounds (particularly young ones) should be often called over in kennel; their names become more familiar to them, and it teaches them obedience; this lesson is practised, or should be, at the time of feeding. Hounds should all be let out into the airing ground to empty themselves after feeding, to prevent an unnecessary accumulation of filth and consequent effluvia in the kennel. It may be a custom with some to shut up the hounds for two or three hours after they return from hunting, before they are fed; if so, it is more entitled to contempt than imitation. No plea can justify the practice; they should have their meat ready for feeding immediately on their return; once gratified they enjoy their rest undisturbed, the best and most natural foundation for renovation of strength. Plenty of vegetables, boiled in the meat copper once a week, is a custom in most kennels, as it is also to throw in a pound or two of sulphur (in proportion to the number), particularly in the summer season, when there is a greater tendency in the blood to morbidity, particularly to cutaneous diseases.

During the hot months, when hounds do not work, they require but a small proportion of substantial food, compared to what is necessary in the severity of the hunting season; flesh may then be given very sparingly; the less it is used in the summer, the less likelihood there will be of seeing that malignant and unwelcome visiter, the mange, amongst them.

Various opinions has been promulgated upon the best, cheapest, and most nutritious food for the support of the hounds in general; but experience seems to have justified the consistency of occasional changes, according to the different seasons, and the different degrees of work; without adhering too closely to one particular mode, unassisted by such deviations as circumstances may render not only prudent and proper, but sometimes unavoidable. Horse-flesh, sheep's trotters, raspings, greaves, bullocks' paunches, (in a scarcity of flesh,) oatmeal, and barley meal, constitute the principal articles upon which hounds are known to subsist; although they are differently prepared, and differently administered, according to the judgment, experience, whim, or caprice, of the parties concerned. It is, however, universally admitted, after a number of fair and impartial trials, that, in respect to the two meals, they act much more profitably and advantageously, when used in a mixed state of nearly equal proportions, than when either is given alone.

Mr. Beckford says, his feeder, who was a good one, and of much experience, mixed the meal in equal quantities; that the oatmeal he boiled for half an hour; and then put out the fire, adding the barley meal, and mixing both together; his reason for boiling one, and not the other, was, that boiling made the oatmeal thick, and the barley meal thin; and that when he fed with the barley meal only, it should not be put into the copper, but mixed up with the scalding liquor in a proper tub, or hogshead, kept for the purpose. There are many little things within the department of the feeder, which, if neglected, become of serious consequence. Nice observation should be made upon the state of the bitches at all times; upon the least indication of their going to heat, they should be instantly removed; a few hours' delay may be the destruction of some of the best hounds in the kennel. After their return on a hunting day, he should ascertain whether there are any hounds who have sustained injuries in the feet by thorns, flints, &c., in which case a fomentation of warm pot liquor (or bran water), followed by a washing of cold vinegar, or salt and water, will generally effect a speedy cure. Hounds, seriously lame, or palpably sick, should be separated from the rest, and placed where they can be more at ease, and have better attention.

* * *

Kennel, is a sporting term for the den in which a fox deposits himself after his nocturnal depredations, and to which he retires about the dawn of day: being found by the hounds in drawing covert, he is then said to be unkennelled, and the chase begins. When safe in some burrow, or hole, below the surface, he is then said to lie at earth.—*Taplin.*

KENNEL, *v.* To lie, to put or keep in kennel.

KESTREL, STONEGALL, STANNEL HAWK, or WINDHOVER, (*Falco Tinnunculus*, LINN.; *La Cresserelle*, BUFF.), *s.* A kind of bastard hawk.

The male of this species differs so much from the female, that we have given a figure of it from one we had in our possession, probably an old one. Its length is fourteen inches; breadth two feet three inches: its bill is blue; cere and eyelids yellow; eyes black, the forehead dull yellow; the top of the head, back part of the neck, and sides as far as the points of the wings, are of a lead colour, faintly streaked with black; the cheeks are paler; from the corner of the mouth on each side there is a dark streak pointing downwards; the back and coverts of the wings are of a bright vinous colour, spotted with black; quill feathers dusky, with light edges; all the under part of the body is of a pale rust colour, streaked and spotted with black; thighs plain; the tail feathers are of a fine blue grey, with black shafts; towards the end there is a broad black bar both on the upper part and under sides; the tips are white: the legs are yellow, and the claws black.

The kestrel is widely diffused throughout Europe, and is found in the most temperate parts of North America: it is a handsome bird; its sight is acute, and its flight easy and graceful: it breeds in the hollows of trees, and in the holes of rocks, towers, and ruined buildings it lays four or five eggs, of a pale reddish colour: its food consists of small birds, field-mice, and reptiles; after it has secured its prey, it plucks the feathers very dexterously from the birds, but swallows the mice entire and discharges the hair, in the form of round balls from its bill. This bird is frequently seen hovering in the air, and fanning with its wings by a gentle motion, or wheeling slowly round, at the same time watching for its prey, on which it shoots like an arrow. It was formerly used in Great Britain for catching small birds and young partridges.

The Female Kestrel.—This beautiful bird is distinguished from every other hawk by its variegated plumage: its bill is blue; cere and feet yellow; eyes dark coloured, surrounded with a yellow skin; its head is rust coloured, streaked with black: behind each eye there is a light spot; the back and wing coverts are elegantly marked with numerous undulated bars of black; the breast, belly, and thighs are of a pale reddish colour, with dusky streaks pointing downwards, vent plain: the tail is marked by a pretty broad black bar near the

end; a number of smaller ones, of the same colour, occupy the remaining part; the tip is pale. * * *

This is one of our most common species, being very generally spread throughout the kingdom, especially in the more rocky situations and high cliffs on our coast, where they breed. The nest is made of a few sticks, loosely put together, and lined with wool and other soft materials, built in trees, in some crevice, or projecting rocky shelf, and sometimes they content themselves with the deserted nest of a crow or magpie. It lays four or five eggs of a dirty white, blotched over with rust-colour of various shades; sometimes wholly covered with a deep rusty red; these are rather inferior in size to those of the sparrow hawk.—*Bewick—Montagu.*

KIBE, *s.* An ulcerated chilblain, a chap in the heel.

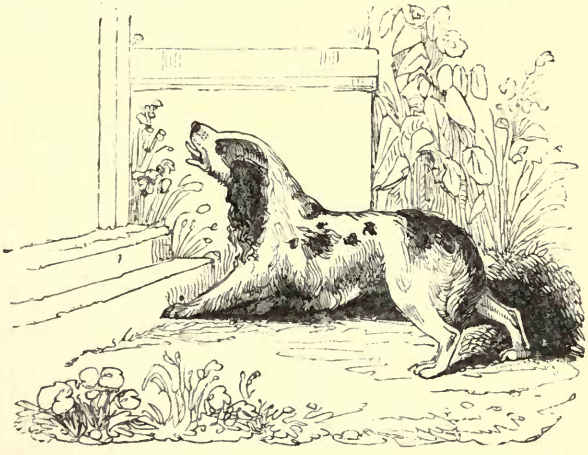
KID, *s.* The young of a goat; a bundle of heath or furze.

KID, *v.* To bring forth kids.

KIDNEY, *s.* One of the two glands that separate the urine from the blood.

KILDERKIN, *s.* A small barrel of eighteen gallons, capacity.

KING CHARLES'S DOG (*Canis Brevipilis*, LINN.), *s.*



This beautiful little animal is much smaller than the cocker, to which he is similar in shape and other characteristics; he has, however, longer ears, and the tail is also longer in proportion to the size of his body. Like the cocker and springer, he is extremely fond of pursuing birds of all kinds, and, like them, too, always gives tongue in pursuit. He is seldom used for field sports, from his diminutive size, being easily tired, and is too short in the legs to get through swampy ground.

This dog is found of all colours; but those which are black, with tanned cheeks and legs, are considered the purest breed. He gets the name of King Charles's dog from the extreme liking the second monarch of that name had for this animal, as he never went out without being followed by eight or a dozen of them. They were also introduced into most of the portraits of himself and family, and particularly in that by Vandyke. They were also his constant companions in the palace.

The use of this varicty at present is as a lap-dog, and they are consequently prized in proportion to the diminutiveness of their size.

The sense of smelling in this little spaniel is very remarkable. The following anecdote is related by Brown to instance it:—

In 1792, a gentleman who lived in Vere Street, Clare Market, went, with his family, to the pit of Drury Lane theatre, at about half-past five in the evening, leaving a small spaniel of King Charles's breed locked up in the dining room, to prevent it from being lost in his absence. At eight o'clock his son opened the door, and the dog immediately went to the playhouse, and found out his master, though the pit was unusually crowded, and its master seated near the centre.

Brown.

KINGFISHER, *s.* A species of bird.

King-fisher. (*Alcedo ispida*, LINN.; *Le Martin-pêcheur*, BUFF.)—This splendid little bird is rather of a clumsy shape, the head being large in proportion to the size of the body, and the legs and feet very small. In length it is only seven inches, in breadth eleven; and its weight is about two ounces and a quarter. The bill, measured from the corners of the mouth, is two inches long, vertically compressed on the sides, strong, straight, and tapering to a sharp point: the upper mandible is black, fading into a red-colour towards the base; the under one, as well as the inside of the mouth, is of a reddish orange: the irides are hazel, inclining to red. A broad stripe passes from the bill over the eye to the hinder part of the neck, a bright orange colour, but margined on the side of the mouth, and crossed, below the eye, by a narrow black stroke, and it is terminated behind the auriculars with a slanting wedge-shaped white spot. The throat is white; the rest of the head and wing coverts are of a deep shining green, spotted with bright light blue: the scapulars and exterior webs of the quills are of the same colour, but without spots. The middle of the back, the rump, and the coverts of the tail are of a most resplendent azure: the tail, which consists of twelve short feathers, is of a rich deep blue, and the whole under part of the body of a bright orange. The legs and toes are of a red-colour, and are peculiar in their shape and conformation, the three forward toes being unconnected from the claws to the first joints, from whence they appear as if grown into each other; and the inner and hinder ones are placed in a line on the inside of the foot, whereby the heel is widened and seems pressed out.

The suspension of this bird by a thread, under the notion that its breast will always turn to the north, is as fabulous as that it will preserve woollen cloth from the moth.

"I have once or twice," says Mrs. Charlotte Smith, "seen a stuffed bird of this species hung up to the beam of a cottage ceiling, and imagined that the beauty of the feathers had recommended it to this sad pre-eminence, till, on inquiry, I was assured that it served the purpose of a weather-vane; and, though sheltered from the immediate influence of the wind, never failed to show every change, by turning its beak to the quarter whence the wind blew." The learned, but somewhat credulous author of the "Physicæ Curiosæ," says the same, upon the testimony of his own observation. "Father Athanasius Kircher," he says, "had one of these birds sent him as a present by a friend, and being disembowelled and dried, it was suspended from the ceiling of his celebrated museum, from 1640 to 1655, when I left Rome; and though all the doors and windows were shut, it constantly turned its bill towards the wind, and this I myself observed with admiration and pleasure almost every day for the space of three years!!"

It is difficult to conceive why ornithologists have classed the kingfisher with land birds, as its habits and manner of living are wholly confined to the waters, on the margins of which it will sit for hours together on a projecting twig or a stone, at one while fluttering its wings and exposing its brilliant plumage to the sun; at another, hovering in the air, like the kestrel, it waits the moment when it may seize its prey, on which it darts with almost

unerring certainty: often it remains for several seconds under the water, before it has gained the object of its pursuit, then brings up the little fish, which it carries to the land, beats to death, and swallows.

The female commonly makes her nest by the sides of rivers or brooks, in a hole made by the mole, or the water-rat: this she enlarges or contracts to suit her purpose; and it is conjectured, from the difficulty of finding the nest, that frequently the hole which leads to it is under water.

Kingfishers are not so numerous as might be expected from the number of eggs found in their nests; owing, probably, to the young being destroyed by the floods, which must often rise above the level of the holes where they are bred.

Except in the breeding-season, the bird is usually seen alone, flying near the surface of the water with the rapidity of an arrow, like a little brilliant meteor, by which appearance the eye is enable to follow its long-continued course. Considering the shortness of its wings, the velocity with which it flies is surprising.

Ornithologists inform us that kingfishers are found in almost every part of the globe; but it does not appear that more than this one species has ever been seen in Europe.

KING DUCK, (*Somateria spectabilis*, FLEMING,) *s.*

This species is not much inferior in size to the eider duck. The bill is almost two inches long, of an orange-colour; at the base of the upper mandible is a ridged protuberance, flat on the top, and compressed on the sides, but divided into two, the elevated parts velvety black, passing on each side to the eyes; the crown of the head and nape are pale ash-colour; at the base of the upper mandible the feathers are pea-green, passing backwards on each side the neck, and taking in half the eye; beneath which, and round to the chin, the feathers are of a dirty white; but here the two colours are blended, and the white is lost by degrees in the green; under the chin is a black mark, diverging like the letter V inverted: the rest of the neck and breast are whitish; the middle of the back, the belly, and vent, black; wings dusky; on the middle of the coverts is a patch of white; quills black; the secondaries curve downwards over the quills; the shafts deep ferruginous, on each side the outer ones a patch of white; the tail is cuneiform, short, and black; legs dusky; the windpipe, according to Captain Sabine, is precisely like that of the eider duck.

The female is less; the protuberance on the bill not so large, nor so high-coloured, but the feathery ridge on the top is broader; the whole plumage brown, the middle of each feather dusky; six of the lesser quills are tipped with white, which forms a line of white on the wing; the rest of the quills and tail brown.—*Montagu.*

KING'S HOUNDS, *s.*

His majesty's stag-hounds pass under this denomination, as a part of the royal establishment continued in every successive reign without variation. The kennel in which they are kept is situate near the race course upon Ascot Heath; at the distance of two short miles from which is Swinley-lodge, the official residence of the master of the stag-hounds, an appointment seldom conferred but upon one of the peerage, and is considered an office of honour, with a salary of 2,000*l.* per annum. The presence of the master of the stag-hounds in the field is not a matter of necessity, but choice, except when his majesty hunts, and then his personal attendance is indispensable; his badge of office is a pair of gold dog couples, which hang suspended from a belt on his left side. The huntsman has a handsome residence at the kennel, with a salary of 125*l.* a year; to whom there are six assistants, (called yeomen prickers) each having a salary of 104*l.* with the royal livery richly ornamented, and an annual supply of saddles, bridles, horse-clothes, and the necessary stable appendages; but they find their own horses.

The hunting season commences on Holyrood day, the 25th of September, and continues every Tuesday and Saturday till the first week in May; with the exception of Christmas and Easter weeks, when they hunt three times in each. Holyrood day and Easter Monday, are two grand days of the year for company, when the field is extremely numerous. His majesty has also a pack of harriers, which are kept at the Little Park Lodge, near Windsor, and these he hunts constantly in Windsor Great Park, and the surrounding neighbourhood; they are, however, a private concern of his majesty's, and not included in the regular Crown establishment.

KING'S PLATE, *s.*

Those called king's-plates are a free gift from his majesty, of 100 guineas each; and, it is believed, were originally granted as a means of exciting such a degree of emulation, as would probably tend to national advantage (by an additional influx of company) to such cities and towns as enjoy the royal favour. Newmarket, as the superior spot of sporting cele-

brity, is particularly honoured, having two in the first Spring, and one in the first October meetings.

King's-plates are also given at Newcastle-upon-Tyne, Guildford, Winchester, Ipswich, Burford, Chelmsford, Nottingham, Lewes, Edinburgh, York, Canterbury, Warwick, Lichfield, Richmond (Yorkshire), Lincoln, Salisbury, Ayr, Carlisle, and Ascot Heath; the whole of which, except the last, are run for by horses or mares of different ages, carrying such weights as shall be appointed by the master of the horse, or whoever he may delegate for that purpose.

The king's-plate, of 100 guineas, given at Ascot, and always run for on the first day, (invariably Whit Tuesday fortnight) is only for horses which have regularly hunted with his majesty's stag-hounds the preceding season, and must have been well up with the hounds, at their running up to, taking, or killing, ten deer, as an indispensable qualification, without having which they cannot be permitted to start. At the conclusion of the chase, when the deer is secured, those who intend to qualify for the plate, apply to the huntsman, and a ticket is delivered to the rider, bearing the arms of the master of the stag-hounds, and the seal of the royal hunt; when which ten tickets are obtained the horse has secured his qualification, may then be withdrawn from the field, and is not obliged to appear again till the day of entrance at Sunning Hill Wells, where the tickets must be produced, in confirmation of his being duly qualified to start. For the accommodation of the sporting world at large, horses of all ages are permitted to run, carrying the following weights:—four years' old, 11st. 2lb.; five years' old, 11st. 9lb.; six years' old, 11st. 12lb.; and aged, 12st. Mares allowed 4lb. The best of three four-mile heats.—*Vide* RACING.

The following rules are, by his majesty's command, to be strictly observed by the owners and riders of all such horses, mares, or geldings, as shall run for his majesty's plates at Newmarket:—

KING'S-PLATE ARTICLES.

Every person that putteth in a horse, mare, or gelding, for the said plate, is to show such horse, mare, or gelding, with the marks, name, and name of the owner, to be entered at the king's stables in Newmarket, the day before they run, and shall then produce a certificate under the hand of the breeder, specifying his exact age the grass before.

Every horse, mare, or gelding, that runneth, is to start between the hours of one and four in the afternoon; and to be allowed half an hour between each heat to rub.

Every horse, mare, or gelding, that runneth on the wrong side the posts or flags, or is distanced in any of the heats, shall have no share of the said plate, nor be suffered to start again.

The horse, mare, or gelding, that winneth any two heats, winneth the plate; but if three several horses, mares, or geldings, win each of them a heat, then those three, and only they, to run a fourth; and the horse, mare, or gelding, that winneth the fourth heat, shall have the plate.

And each horse, mare, or gelding's place, as he or they come in by the ending post each heat, as first, second, or third, &c., shall be determined by such judges as shall be appointed for that purpose by the Master of the Horse. And in case any horse, mare, or gelding, shall be then, or after prove to be, above the age certified the grass before, the owner or owners of such horse, mare, or gelding, shall be rendered incapable of ever running for any of the king's plates hereafter.

As many of the riders as shall cross, jostle, or strike, or use any other foul play, as shall be judged by such person or persons as shall be appointed by the Master of the Horse, such rider shall be made incapable of ever riding any horse, mare, or gelding, for any of his majesty's plates hereafter; and such owners shall have no benefit of that plate; but such owners may be permitted to run any horse, mare, or gelding, for any other of his majesty's free plates in future.

Every rider shall, immediately after each heat is run, be obliged to come to the ending post with his horse, mare, or gelding, then and there to alight, and not before, and there to weigh to the satisfaction of the judges appointed for that purpose.

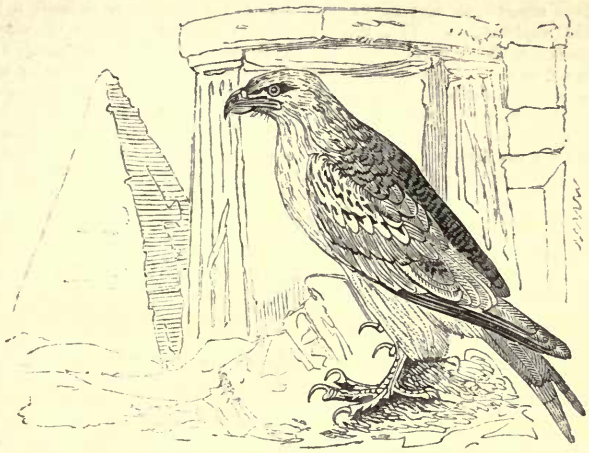
And in case of neglect or refusal thereof, such winners and riders shall be immediately declared incapable of running or riding any more for this or any of his majesty's plates in future.

And should any difference arise relating to their ages, or in their running, or to these his majesty's orders, the same to be determined by such person or persons as shall be appointed by the Master of the Horse. And these articles are to continue in force, unless altered by command of his majesty.

For the better and more certain prevention of any fraud or misapplication, the winner of a king's plate is to receive from the clerk of the course, a certificate signed by the steward of the race where such plate is won, countersigned by himself also, which being presented to the lord lieutenant of the county, it obtains his signature likewise: when thus sanctioned, it becomes payable at sight to bearer (if properly endorsed by the winner,) at the office of the clerk of his majesty's stables, in the King's Mews, London. The lord lieutenant of a county being out of the kingdom, the

signature of any person regularly deputed by him is sufficient. The certificate of winning the plate at Ascot requires only the signature of the master of his majesty's stag hounds, instead of the lord lieutenant of the county.

KITE, *s.* A bird of prey that infests the farms, and steals the chickens; a fictitious bird made of paper.



This bird is easily distinguished from the buzzard by its forked tail, which is its peculiar and distinguishing feature. Its length is about two feet; its bill is of a horn colour, furnished with bristles at the base; its eyes and cere are yellow; the feathers on the head and neck are long and narrow, of a hoary colour, streaked with brown down the middle of each; those on the body are of a reddish brown colour, the margin of each feather pale; the quills are dark brown, the legs yellow, and the claws black. It is common in England, where it continues the whole year. It is found in various parts of Europe, in very northern latitudes, whence it retires towards Egypt before winter, in great numbers; it is said to breed there, and return in April to Europe, where it breeds a second time, contrary to the nature of rapacious birds in general. The female lays two or three eggs of a whitish colour, spotted with pale yellow, and of a roundish form. Though the kite weighs somewhat less than three pounds, the extent of its wings is more than five feet; its flight is rapid, and it soars very high in the air, frequently beyond the reach of our sight; yet, at this distance, it perceives its food distinctly, and descends upon its prey with irresistible force: its attacks are confined to small animals and birds; it is particularly fond of young chickens, but the fury of their mother is generally sufficient to drive away the robber.—*Bewick.*

KITTEN, *s.* a young cat.

KITTEN, *v.* To bring forth young cats.

KNEE, *s.* The joint of the leg where the leg is joined to the thigh; a knee is a piece of timber growing crooked, and so cut that the trunk and branch make an angle.

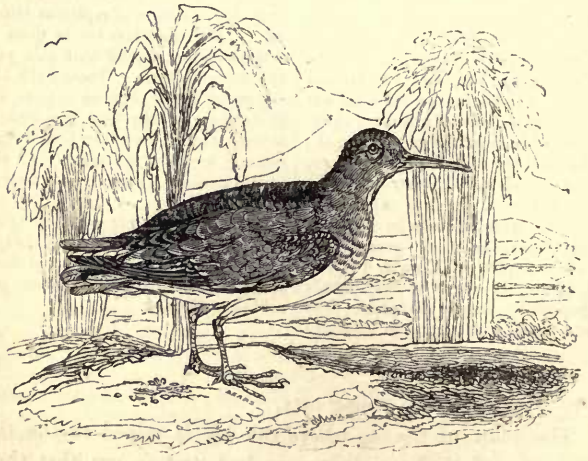
Knee of a Horse is the central joint of the leg, where the fore thigh is united to the shank bone. Its formation is of such strength, that a lameness, by twist, distortion, or any other injury, is hardly ever sustained in this part, but by the accident of falling, which frequently happens, and, if attended with a blemish, very much reduces the previous value of the horse. Prominences in a pavement, or rolling stones upon a road, are sometimes the occasion of such misfortunes, even to those who are in general exceedingly sure-footed, and

of the most valuable description. Custom has, however, introduced of late years such an unprecedented degree of precaution in an examination of the knees, that the slightest touch cannot be expected to pass unnoticed amidst so much scrutinising inspection; and if once appearances are sufficient to justify a doubt, the object immediately sinks in estimation, however superior he may be in other respects and qualifications. This being so great a disadvantage when a horse is to be sold, it evidently points out the absolute necessity of a minute examination before he is bought, as a want of it may produce considerable loss and serious reflection. Loss of hair upon the knees, when not too seriously affected, may sometimes be restored by a daily application of very strong camphorated liniment.

* * *

The knee of the horse corresponds with the human wrist. Like the joints generally, it should be large, by which the surface of muscular and ligamentous contact becomes increased, and the stability of the limb in proportion augmented; by this form also the tendinous insertions are further removed from the centre of motion, and thereby their power is increased. The knee should be carefully examined, to see whether the skin has been broken by falls; and great caution is necessary in this, for the hair sometimes grows so well over the scar as to leave it hardly discernible. Horse dealers likewise hide the blemish by blackening the part. It does not, however, follow that a mark or scar always indicates a stumbler; and persons are too apt to forget that the safest horse may by an unavoidable accident fall; but which circumstance will never influence his future manner of going, unless the cicatrix should be of such extent as to interfere with the motion of the joint; if, therefore, the arm and fore-arm be strong, the fore-hand high, and the horse show good action, he should not be rejected wholly for an accidental blemish.—*Blaine.*

KNOT, *s.* A complication of a cord or string not easily to be disentangled; a hard part in a piece of wood; a confederacy, an association, a small band; intricacy; a cluster, a collection; a fen bird. Knot is the division of the log-line answering to half a minute as a mile does to an hour.



These birds, like others of the same genus, differ considerably from each other in their appearance in different seasons of the year, as well as from age and sex. The specimen from which the above drawing was taken measured from the point of the bill to the tip of the tail eight inches and a half; the extended wings about fifteen; and it weighed two ounces eight drachms. The bill is one inch and three-eighths long, black at the tip, and dusky, fading into orange towards the base; tongue of nearly the same length, sharp, and horny at the point: sides of the head, neck, and breast, cinereous, edged with ash-coloured

grey; the chin white, and a stroke of the same colour passed over each eye. All the upper parts of the plumage were darkish-brown, but more deep and glossy on the crown of the head, back, and scapulars, and each feather was edged with ash or grey; the under parts were a cream-coloured white, streaked or spotted with brown on the sides and vent; the greater coverts of the wings tipped with white, which formed a bar across them when extended; the legs reddish yellow and short, not measuring more than two inches and one-eighth from the middle toe nail to the knee; the thighs feathered very nearly to the knee; toes divided without any connecting membrane.

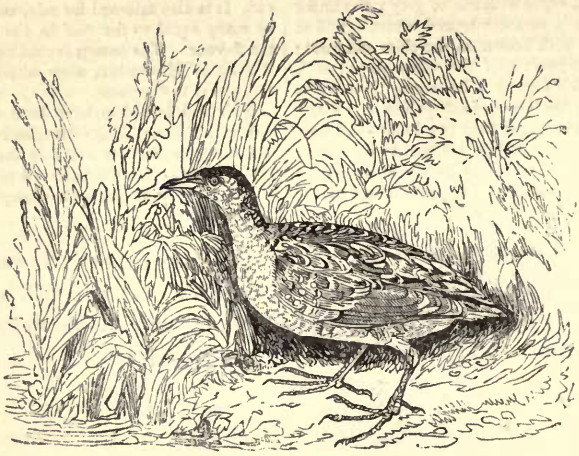
This bird is caught in Lincolnshire and the other fenny counties in great numbers by nets, into which it is decoyed by carved wooden figures painted to represent itself, and placed within them, much in the same way as the ruff. It is also fattened for sale, and esteemed by many equal to the ruff in the delicacy of the flavour. The season for taking it is from August to November, after which the frost compels it to disappear.

This bird is said to have been a favourite dish with Canute, King of England; and Camden observes that its name is derived from his—Knute or Knoute, as he was called, which in process of time has been changed to Knot. —*Bewick.*

KNOT, *v.* To complicate in knots; to entangle, to perplex; to unite.

KNOTTY, *a.* Full of knots; hard, rugged; intricate, perplexed.

KNUCKLE, *s.* The joints of the fingers, protuberant when the fingers close; the joint of a calf; the articulation or joint of a plant.



THE LAND-RAIL.

LACE, *s.* A string, a cord; a snare, a gin.

LACERATION, *s.* The act of tearing or rending; the breach made by tearing.

LAIR, *s.* The couch of a boar, or wild beast; the place where deer harbour by day.

LAKE, *s.* A large diffusion of inland water; a small plash of water; a middle colour betwixt ultramarine and vermilion.

LAME, *a.* Crippled, disabled in the limbs.

LAMENESS, *s.* The state of a cripple, loss or inability of limbs; imperfection, weakness.

Lameness in Horses.—Proceeds from a variety of causes, and requires much patient investigation to ascertain, to a certainty, the exact seat of injury; for want of which judicious precaution, mischief frequently follows. Horses are sometimes persecuted, blistered, and fired for a lameness in one part, which ultimately proves to be in another, and this alone sufficiently points out the absolute necessity of a deliberate discrimination. As lameness proceeds from different causes, so it is of different kinds, and requires various modes of treatment, equally opposite to each other. This cannot be more forcibly elucidated, than by adverting to the difference between a lameness originating in a relaxation of the sinews, and a ligamentary injury sustained by a sudden turn, twist, or distortion, of some particular joint. These require a very different mode of treatment; and yet it is too much, and too unthinkingly the custom to treat every kind of lameness in the same way. From either a want of patience in the owner, or a want of prudence in the practitioner, the favourite operation of blistering is thought applicable to every case without exception; and being often resorted to before the inflammation of the part has sufficiently subsided, occasions a permanent enlargement, with a thickening of the integument, and consequent stiffness, rendering

the remedy equally injurious with the original defect.

In all lamenesses occasioned by a relaxation of the tendons, blistering, and even firing, are admitted to have a forcible effect, provided they are brought into use at a proper time; but not before the inflammation (which is generally attendant upon such case) has previously subsided. In all ligamentary injuries blistering is seldom, if ever, known to be productive of permanent advantage; and is, perhaps, upon most occasions, so immediately adopted, because a single application is of so much less personal trouble, than a daily persevering hour bestowed in a hot fomentation, and stimulative embrocations.

Upon the subject of lameness in general, it is necessary to remark, that injuries sustained in tendons (commonly called the back sinews) are more frequently relieved, and a lasting cure obtained, than in a lameness of the joints; where, after patient and persevering medical applications, and a corresponding portion of rest, a renewal of work has almost immediately produced a relapse.

* * *

Lameness, from whatever cause arising, is unsoundness. However temporary it may be, or however obscure, it lessens the utility of the horse, and renders him unsound for the time. How far his soundness may be afterwards affected, must depend on the circumstances of the case. A lame horse is for a time an unsound one. * * *

Lameness in Dogs.—During the hunting or shooting season, dogs are very liable to sore feet: they should be frequently washed with strong brine, pot liquor, or salt and vinegar,—a handful of the former to a pint of the latter. But as it will be found easier to prevent than cure the affection, this is best done by washing their feet every day, when returning from the field, with pot-liquor or brine.—*The Horse—Brown.*

LAMPASS, *s.* A lump of flesh, about the bigness of a nut, in the roof of a horse's mouth.

Lampass.—Called also lampers, and lampards, is a spongy, elastic enlargement of the roof of a young horse's mouth, just behind the nippers of his upper jaw, which frequently acquires such a luxuriance in growth, as to be equal with, or to exceed, the surface of the teeth, and is supposed to occasion pain to such horses in the mastication of their corn. Whenever the lampass are found so protuberant as to justify an opinion, or produce a proof, that they occasion pain in mastication, it is then time enough to pass the point or edge of a sharp penknife, or lancet, transversely and longitudinally over the puffy and prominent part, so as to let it bleed in that state for a few minutes; then let it be washed with a solution of alum in water, and no further inconvenience need be apprehended.—*White.*

LAMPBLACK, *s.* Is made by holding a torch under the bottom of a basin, and as it is furred striking it with a feather into some shell, and grinding it with gum water.

LAMPREY, *s.* A kind of eel.

The sight of a large square slab of white marble at a trifling distance from the main road on this mountain, excited my curiosity some days ago. It contained a modern Latin inscription of great length, which for its singularity I would send you, but I wish to save postage. The traveller is desired to pause, in order to behold an ocular demonstration of the cruelty and impiety of the ancient pagans, exhibited in the fish-ponds of A. Pollio, Esq. who, says the marble, was particularly fond of lampreys fed with *human blood;* and who to gratify this inhuman sort of gluttony, had these ponds built at an immense expense, and caused the wretched victims of his corrupt palate to be thrown into them. Accepting the pious invitation, I entered the farm pointed out by the inscription, and actually found the farm-house to consist of some modern masonry engrafted upon a solid stock of ancient reticulated architecture. At the back of the building a small door opened into the ponds, which even now appeared to be abundantly supplied with water, rising to the height of about eight or ten feet, from the door downwards, and covered by an arched vault nearly as high from the top of the door: the sides were lined with a stucco, as hard, if not harder than stone. The whole fabric was in perfect preservation, and well worth the attention of an antiquary; but my conductor was unable to add anything to the information given by the inscription, which, I confess, appeared to me very problematical. The neat and impenetrable covering of stucco, would rather induce me to take it for a reservoir, or large cistern for water, than a pond for lampreys: and supposing it to have been the latter, where is the evidence of human bodies having supplied their food; and supposing the Roman laws to have been lax enough to allow such a diabolical practice, what stomach could relish such a dainty?—*Letters from the Campagna Felice.*

LAMPRON, *s.* A kind of sea-fish, a long eel.

LANCE, *v.* To pierce, to cut; to open chirurgically, to cut in order to a cure.

LANCET, *s.* A small pointed chirurgical instrument.

LAND, *v.* To set on shore; to secure a fish.

LANDMARK, *s.* Anything set up to preserve boundaries.

LANDRAIL, or DAKER HEN, CORNCRAKE, (*Rallus crex*, LINN.; *Le Rale de Genet*, BUFF.) *s.* A bird.

Length rather more than nine inches; the bill is light brown; the eyes hazel; all the feathers on the upper parts of the plumage are of a dark brown, edged with pale rust colour; both wing coverts and quills are of a deep chestnut; the fore part of the neck and the breast are of a pale ash colour; a streak of the same colour extends over each eye from the bill to the side of the neck; the belly is of a yellowish white; the sides, thighs, and vent, are marked with faint rusty coloured bars; the legs are of a pale flesh colour.

We have ventured to remove this bird from the usual place assigned to it among those to whom it seems to have little or no analogy, and have placed it among others to which in most respects it bears a strong affinity.

It maks its appearance about the same time as the quail, and frequents the same places, whence it is called in some counties the king of the quails. Its well known cry is first heard as soon as the grass becomes long enough to shelter it, and continues till the grass is cut; but the bird is seldom seen, for it constantly skulks among the thickest part of the herbage, and runs so nimbly through it, winding and doubling in every direction, that it is difficult to come near it; when hard pushed by the dog, it sometimes stops short and squats down, by which means its too eager pursuer overshoots the spot, and loses the trace. It seldom springs but when driven to extremity, and generally flies with its legs hanging down, but never to a great distance; as soon as it alights it runs off, and before the fowler has reached the spot, the bird is at a considerable distance.

The corncrake leaves the island before the winter, and repairs to other countries in search of its food, which consists principally of slugs, of which it destroys prodigious numbers; it likewise feeds on worms and insects, as well as on seeds of various kinds. It is very common in Ireland, and is seen in great numbers in the Island of Anglesea on its passage to that country. On its first arrival in England, it is so lean as to weigh less than six ounces, from which one would conclude that it must have come from distant parts; before its departure, however, it has been known to exceed eight ounces, and is then very delicious eating.

The female lays ten or twelve eggs on a nest made of a little moss or dry grass, carelessly put together; they are of a pale ash-colour, marked with rust-coloured spots. The young crakes are covered with black down; they soon find the use of their legs, for they follow the mother immediately after they have burst the shell.

* * *

This is deemed a bird of passage by all the writers: yet from its formation seems to be poorly qualified for migration; for its wings are short, and placed so forward, and out of the centre of gravity, that it flies in a very heavy and embarrassed manner, with its legs hanging down; and can hardly be sprung a second time, as it runs very fast, and seems to depend more on the swiftness of its feet than on its flying.

When we came to draw it, we found the entrails so soft and tender, that in appearance they might have been dressed like the ropes of a woodcock. The craw or crop was small and lank, containing a mucus; the gizzard thick and strong, and filled with small shell snails, some whole, and many ground to pieces through the attrition which is occasioned by the muscular force and motion of that intestine. We saw no gravels among the food: perhaps the shell snails might perform the function of gravels or pebbles, and might grind one another. * * *

That it is a bird of passage there can be little doubt, though one would think it poorly qualified for migration, on account of the wings being short, and not placed in the exact centre of gravity: how that may be I cannot say, but I know that its heavy sluggish flight is not owing to its inability of flying faster, for I have seen it fly very swiftly, although in general its actions are sluggish. Its unwillingness to rise proceeds, I imagine, from its sluggish disposition, and its great timidity, for it will sometimes squat so close to the ground as to suffer itself to be taken up by the hand, rather than rise; and yet it will at times run very fast.

What Mr. White remarks respecting the small shell snails found in its gizzard, confirms my opinion, that it frequents corn fields, seed clover, and brakes or fern, more for the

sake of snails, slugs, and other insects which abound in such places, than for the grain or seeds; and that it is entirely an insectivorous bird.—*Bewick—White's Selborne—Wood.*

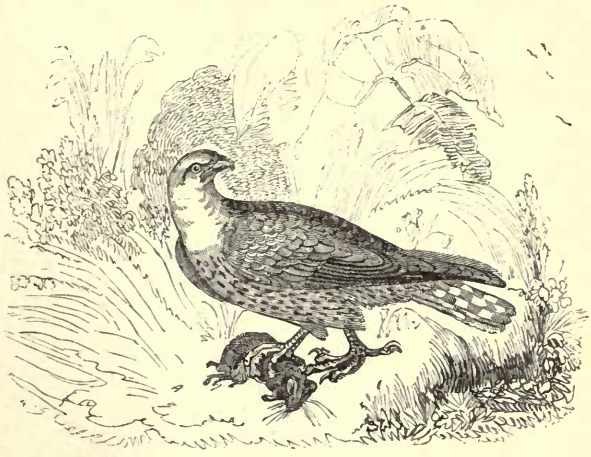
LANERET, *s.* A little hawk.

LANIGEROUS, *a.* Bearing wood.

LANIUS (LINN.), *s.* Shrike, a genus thus characterised:—

Bill of middle size, strong, much compressed; the upper mandible strongly curved towards the point, where it forms a hook; the base without a cere, but furnished with coarse hairs directed forward; nostrils at the side of the base, almost round, half shut by a vaulted membrane, often in part concealed by the hairs; feet with the shank longer than the middle toe; three toes before and one behind, quite divided; wings, the first quill of middle length, the second a little shorter than the third and fourth, which are the longest in the wing.—*Montagu.*

LANNER, (*Falco lanarius*, LINN.; *Le Lanier*, BUFF.) *s.* A species of hawk.



This bird is somewhat less than the buzzard. Its bill is blue; cere inclining to green; eyes yellow: the feathers on the upper part of the body are brown, with pale edges; above each eye there is a white line, which runs towards the hinder part of the head, and beneath it is a black streak pointing downwards towards the neck; the throat is white; the breast of a dull yellow, marked with brown spots; thighs and vents the same; the quill feathers are dusky, marked on the inner webs with oval spots of rust colour; the tail is spotted in the same manner; the legs are short and strong, and of a bluish colour.

The lanner is not common in England; it breeds in Ireland, and is found in various parts of Europe. It derives its name from its mode of tearing its prey into small pieces with its bill.—*White.*

LANSQUENET, *s.* A common foot-soldier; a game at cards.

This game may be played by almost any number of people, although only one pack of cards is used at a time, during each deal. The dealer, who has rather an advantage, begins by shuffling the cards, and having them cut by any other person of the party; after which he deals out two cards on his left hand, turning them up; then one for himself and a fourth, which he places in the middle of the table for the company, called the *rejouissance* card. Upon this card any, or all of the company, except the dealer, may put their money, either a limited or unlimited sum, as may be agreed on, which the dealer is obliged to answer, by staking a sum equal to the whole that is put upon it by different persons. He continues

dealing, and turning the cards upwards, one by one, till two of a sort appear; for instance two aces, two deuces, &c., which, in order to separate, and that no person may mistake for single cards, he places on each side of his own card; and as often as two, three, or the fourth card of a sort come up, he always places them in the same manner, on each side of his own. Any single card the company has a right to take and put money upon, unless the dealer's own card happens to be double, which often occurs by this card being the same as one of the two cards which he first of all dealt out on his left-hand. Thus he continues dealing till he brings either their cards, or his own. As long as his own card remains undrawn he wins; and whichever card comes up first loses. If he draw or deal out the two cards on his left, which are called the hand-cards, before his own, he is entitled to deal again; the advantage of which is merely his being exempted from losing when he draws a similar card to his own immediately after he has turned up one for himself.

This game is often played more simply without the *rejouissance* card, giving every person round the table a card to put money upon. Sometimes it is played by dealing only two cards, one for the dealer and another for the company.—*Hoyle.*

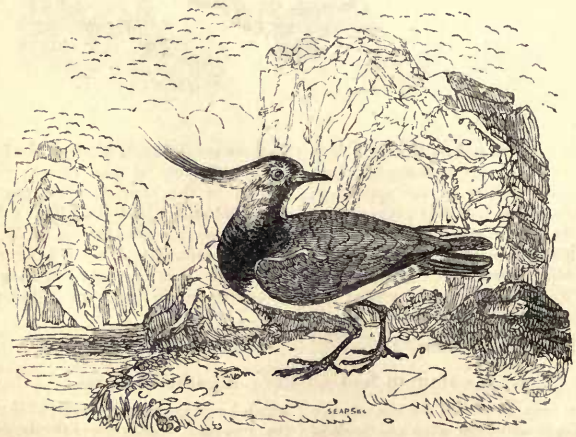
LANTERN, *s.* A transparent case for a candle; a lighthouse; a light hung out to guide ships.

LAP, *v.* To wrap or twist round anything; to involve in anything.

LAPDOG, *s.* A little dog, fondled by ladies in the lap; generally a common nuisance.

In one of the ships of the fleet, that sailed lately from Falmouth, for the West Indies, went passengers, a lady and her seven lapdogs, for the passage of each of which she paid thirty pounds, on the express condition, that they were to dine at the cabin-table, and lap their wine afterwards. Yet these happy dogs do not engross the whole of their good lady's affection; she has also, in Jamaica, forty cats and a husband.—*Country Newspaper.*

LAPWING, BASTARD PLOVER, or PEE WIT, (*Tringa vanellus*, LINN.; *Le Vanneau*, BUFF.) *s.* A clamorous bird with long wings.



This bird is about the size of a pigeon. Its bill is black; eyes large and hazel; the top of the head is black, glossed with green; a tuft of long, narrow feathers issues from the back part of the head, and turns upwards at the end; some of them are four inches in length; the sides of the head and neck are white, which is interrupted with a blackish streak above and below the eye; and the back part of the neck is a very pale brown; the fore-

part, as far as the breast, is black; the back and the wing coverts are of a dark green, glossed with purple and blue reflections; the quills are black, the first four tipped with white; the breast and belly are of a pure white; the upper-tail coverts and vent pale chestnut; the tail is white at the base, and the rest of it is black, with pale tips; the outer feathers almost wholly white, the legs are red; claws black; hind-claw very short.

This bird is a constant inhabitant of this country; but as it subsists chiefly on worms, it is forced to change its place in quest of food, and is frequently seen in great numbers by the sea-shore, where it finds an abundant supply. It is everywhere well known by its loud and incessant cries, which it repeats without intermission whilst on the wing, and from which, in most languages, a name has been given it, imitative of the sound. The peewit is a lively, active bird, almost continually in motion; it sports and frolics in the air in all directions, and assumes a variety of attitudes; it remains long upon the wing, and sometimes rises to a considerable height; it runs along the ground very nimbly, and springs and bounds from spot to spot with great agility. The female lays four eggs of a dirty olive, spotted with black: she makes no nest, but deposits them upon a little dry grass hastily scraped together: the young birds run very soon after they are hatched: during this period the old ones are very assiduous in their attention to their charge; on the approach of any person to the place of their deposit they flutter round his head with cries of the greatest inquietude, which increase as he draws nearer to the spot where the brood are squatted; in case of extremity, and as a last resource, they run along the ground as if lame, in order to draw off the attention of the fowler from any farther pursuit. The young lapwings are first covered with a blackish down, interspersed with long white hairs, which they gradually lose, and about the latter end of July, they acquire their beautiful plumage. At this time they assemble in flocks, which hover in the air, saunter in the meadows, and after rain disperse among the ploughed fields. In October the lapwings are very fat, and are then said to be excellent eating. Their eggs are considered as a great delicacy, and are sold in London at three shillings a dozen.

The following anecdote communicated by the late Rev. J. Carlyle, is worthy of notice, as it shows the domestic nature of this bird, as well as the art with which it conciliates the regard of animals differing from itself in nature, and generally considered as hostile to every species of the feathered tribe. Two of these birds, given to Mr. Carlyle, were put into a garden, where one of them soon died; the other continued to pick up such food as the place afforded, till winter deprived it of its usual supply: necessity soon compelled it to draw nearer the house, by which it gradually became familiarised to occasional interruptions from the family. At length one of the servants, when she had occasion to go into the back-kitchen with a light, observed that the lapwing always uttered his cry 'pee wit' to obtain admittance. He soon grew more familiar; as the winter advanced he approached as far as the kitchen, but with much caution, as that part of the house was generally occupied by a dog and a cat, whose friendship the lapwing at length conciliated so entirely, that it was his regular custom to resort to the fireside as soon as it drew dark, and spend the evening and night with his two associates, sitting close by them, and partaking of the comfort of a warm fireside. As soon as spring appeared, he left off coming to the house, and betook himself to the garden; but on the approach of winter he had recourse to his old shelter and his old friends, who received him very cordially. Security was productive of insolence; what was at first obtained with caution, was afterwards taken without reserve: he frequently amused himself with washing in the bowl which was set for the dog to drink out of, and while he was thus employed, he showed marks of the greatest indignation if either of his companions presumed to interrupt him. He died in the asylum he had chosen, being choked with something he had picked up from the floor. During his confinement, crumbs of wheaten bread were his principal food, which he preferred to any thing else.

LARD, *s.* The grease of swine; the chief ingredient in composing ointments.

LARK, *s.* A small singing bird.

From the peculiar construction of the hinder claws, which are very long and straight, larks generally rest upon the ground; those which frequent trees perch only on the larger branches. They all build their nests upon the ground, which exposes them to the depredations of the smaller kinds of voracious animals, such as the weasel, stoat, &c., which destroy great numbers of them. The cuckoo, likewise, which makes no nest of its own, frequently substitutes its eggs in the place of theirs. The general characters of this species are thus described:—

The bill is straight and slender, bending a

little towards the end, which is sharp pointed; the nostrils are covered with feathers and bristles: the tongue is cloven at the end; tail somewhat forked; the toes divided to the origin; claw of the hinder toe very long, and almost straight; the fore claws very short, and slightly curved.

Twirling for larks is a species of amusement peculiar to the French, and is thus described:—

These birds are attracted to any given spot in great numbers, by a singular contrivance, called a mirror.

This is a small machine, made of a piece of mahogany, shaped like a chapeau bras, and highly polished, or else it is made of common wood, inlaid with small bits of looking-glass, so as to reflect the sun's rays upwards; it is fixed on the top of a thin iron rod, on an upright spindle, dropped through an iron loop, or ring, attached to a piece of wood to drive into the ground. By pulling a string, fastened to the spindle, the mirror twirls, and the reflected light unaccountably attracts the larks, who hover over it, and become a mark for the sportsman. In this way, says an old sportsman, I have had capital sport. A friend of mine actually shot six dozen before breakfast; while he sat on the ground he pulled the twirler himself, and his dogs fetched the birds as they dropped. However, I go on in the common way, and employ a boy to work the twirler. Ladies often partake of the amusement, on a cold dry morning, not by shooting, but by watching the sport: so many as ten or a dozen parties are sometimes out together, firing at a distance of five or six hundred yards, and in this way the larks are constantly kept on the wing. The most favourable mornings are when there is a gentle light frost, with little or no wind, and a clear sky; for when there are clouds, the larks will not approach. One would think the birds themselves enjoyed their destruction, for the fascination of the twirler is so strong, as to rob them of the usual fruits of experience; after being fired at several times, they return to the twirler, and form again into groups, above it; some of them even fly down, and settle upon the ground within a yard or two of the astonishing instrument, looking at it this way and that way, and all ways together, as if nothing had happened.—*Sporting Anecdotes.*—*Bewick.*

Larva, *s.* The enica or caterpillar.

Larus (*Auctores*), *s.* Gull, a genus thus characterised.

Bill long or middle sized, strong, hard, compressed, cutting, curved towards the point, the under mandible forming a saliant angle. Nostrils at the sides, in the middle of the bill, slit lengthwise, straight, pierced from part to part. Legs slender, naked to the knee; shank long; three toes before, wholly webbed; the hind toe free, short, and jointed high upon the shank. Tail with the feathers of equal length; wings long, the first quill almost of equal length with the second.—*Montagu.*

Lash, *s.* A stroke with anything pliant and tough; the thong or point of the whip; a leash, or string in which an animal is held.

Laudanum, *s.* A soporific tincture; liquid opium.

Laughing Gull (*Larus ridibundus*, Leisler), *s.*

Length fifteen, breadth thirty-seven inches; weight ten ounces. Bill and feet rich vermilion; irides hazel; round the eyes a few white feathers; lower part of the neck, tail, and belly white; the back and wings grey; primores white, the first with the outer margin black; the second tipped with black, and marked with a black spot on the inner web. In winter the head is white, with a black patch on the ear, and another in front of the eyes; under the wing blackish grey. Female similar. Nest, according to Wilson, in meadows and islands in fresh water lakes. Eggs three, olive, with dusky blotches. It leaves Scotland in winter, but is a permanent resident in England.

These birds appear to be subject to great variety, either from age or from change of season, and in those changes they have been described as different species. The red-legged gull of authors is only this bird before it is arrived at maturity; and there seems no doubt but the old birds lose the black on the head in the winter, and do not assume it again till the breeding season; but there is generally a little black about the ears; the bill and legs also lose their bright colour.

We have seen hundreds of these birds together in the winter, but have never seen one with a black head at that season. They appear in great abundance in the autumn, on the coast of Caermarthen and Glamorganshire, particularly about the mouths of rivers. At that time the head is white, in some mottled with brown, with a dusky spot behind the ear; the back and wing coverts in young birds are mottled with brown and white; the tail crossed with a dusky bar at the end; the

bill and legs scarcely tinged with red. Towards spring the back begins to assume the ash-colour; then the wing coverts, and the bill and legs, obtain their proper colour; the black behind the ears spreads and meets behind, and on lifting up the feathers of the crown about the month of March, the stubs of the black feathers are to be observed. At this time also some few black feathers appear on the throat; but the perfect black head is not assumed during their stay in those parts. In Devonshire we have seen them complete in feather later in the spring, but never remember to have observed the same appearance in winter.

The laughing gull is said to breed in Lincolnshire in the fens, and in other parts of England, upon the borders of rivers.

* * *

Dr. Plott assures us, in his History of Staffordshire, that in his time these birds annually visited a pool in Staffordshire. He also assures us that they would not breed on any other land than that of the proprietor of the before-mentioned place; and that on the death of the owner, they deserted the pool for three years, but only retired to another estate belonging to the next heir.

The young birds were accounted good eating, and were taken by driving them into nets before they could fly; that fifty dozen were taken at a driving, and that five shillings per dozen was the usual price.

The young were kept alive and fattened on offal. It is also added that three drivings were generally made in a season; and that anciently as many were taken as produced a profit of fifty or sixty pounds.

No author mentions their being seen in winter, having at that time been made a distinct species under various denominations.

* * *

It makes a nest on the ground with rushes, dead grass, and such like materials, and lays three eggs, of an olivaceous brown, marked with rusty brown blotches.—*Montagu.*

Launcefish, or Sandlance, *s.* A sea fish which buries itself, on the recess of the tide, more than a foot deep in the sand. It is much used for baits.

Launch, *v.* To force into the sea; to rove at large.

Laurel, *s.* A tree, called also the cherry bay.

Lavaret, *s.* A bird; a lake fish.

Lavaret is a fish known in England by the name of shelley or fresh water herring, in Wales by that of gwinniad; in Ireland by that of pollan; and in Scotland by that of vangis. In colour it is most like a grayling, but with broader and larger scales; it is common in the large lakes of most Alpine countries, and is known at Geneva by the name of ferra; and I believe that the salmo cerulcus, or wartmann of Bloch, or the gang-fisch of the Lake of Constance, from a comparison that I made of it with the ferra, is a variety of the same fish. It sometimes is as large as two pounds, and when quite fresh, and well fried or boiled, is an exceedingly good fish, and carves like grayling. The lavaret of different lakes has appeared to me to vary in the number of the spines in the fins. One brought me from the Lake of Zurich, thirteen inches long and eight inches in girth, had twelve spines in the dorsal fin, fifteen in the pectoral fins, eleven in the ventral, thirteen in the anal, and eighteen in the caudal. The gang-fisch, from the Lake of Constance, which was of a bluer colour, but I think decidedly only a variety of the same fish, was seven inches and three-quarters long, and four in girth, had twelve spines in the dorsal fin, fifteen in the pectoral, eleven in the ventral, twelve in the anal, and eighteen in the caudal. A lavaret from the Traun See had twelve spines in the dorsal fin, seventeen in the pectoral, thirteen in the ventral fin, twelve in the anal fin, and twenty-four in the caudal fin. One from the Hallstadt See was a larger and broader fish, but did not differ from the lavaret of the Traun See, except in having two spines less in the tail. It is only taken with nets. It feeds on vegetables, and in the stomachs of those I have opened I have never found either flies or small fishes.—*Salmonia.*

Lawn, *s.* An open space between woods; fine linen.

Laxative, *s.* Medicines that open the bowels moderately, without stimulating them so much as to increase their secretions. They consist of castor, olive, or linseed oils; the neutral salts, common salt, and small doses of aloes, as in the following formula:—

LAXATIVE DRENCH.

1. Castor oil	1 pint.
2. Sweet oil, or linseed, or rape oil	1 pint.
3. Epsom salt	6 to 12 oz.
Whey or gruel	1 quart.
Castor oil	6 to 12 oz.—Mix.
4. Powdered aloes	2 to 3 dr.
Carbonate of potash	2 dr.
5. Water	8 oz.
Castor oil	8 oz.—Mix.

BALL.

Aloes	3 to 4 dr.
Soap	3 to 4 dr.
Syrup enough to form a ball.	

LAY, *s.* Grassy ground, meadow, ground unploughed. LEA, *s.* Ground enclosed.

LEAD, *s.* A soft heavy metal.

Many useful preparations are made from this metal; among which are the following:—

Acetate, or *super-acetate* of lead, commonly called *sugar of lead*, is used in making cooling lotions and eye-washes.

Red Lead, or *Minium*, is a red powder, made by mixing lead in a high degree of heat. It is used in the composition of plasters and charges.

White Lead is often employed in the composition of healing and softening ointment, for horses that are subject to cracked heels.

LEAD, *v.* To fit with lead in any manner; to lead lines. *Vide* LINES.

LEADER, *s.* One that leads or conducts; commander; one who goes first; foremost horse in a tandem or team.

LEAGUE, *s.* A measure of length, containing three miles.

LEAN, *a.* Meagre, wanting flesh; out of condition.

LEAN, *s.* The part of flesh which consists of the muscle without the fat.

LEAP, *v.* To pass over or into by leaping.

LEAP, *s.* Bound, jump, act of leaping; space passed by leaping; an assault of an animal of prey; embrace of animals.

LEASH, *s.* A brace and a half; a leather thong, by which a falconer holds his hawk, or a courser leads his greyhound; a band wherewith to tie anything in general.

Leash is a sporting term in use to imply the number three; as exceeding one, and not reaching two brace; for instance, a brace of hares, a leash of pheasants, and two brace of partridges. A brace of pointers, a leash of greyhounds, and two brace of spaniels. Custom, however, in this, as in most other things, admits of deviation and exception; in proof of which we say a brace of spaniels, a couple and a half of hounds, and two brace of pointers; a brace of snipes, a couple and a half of woodcocks, and two couple of rabbits. It is therefore consistent and sportsman-like to say a leash of birds (partridges), a leash of pheasants, a leash of hares, or any other article where two are termed a brace; but improper to call three a leash, where two of the kind are called a couple.

LEATHER, *s.* Dressed hides of animals.

LEECH, *s.* A physician, a professor of the art of healing; a kind of small water serpent, which fastens on animals, and sucks the blood.

LEEWARD, *a.* Under the wind, on the side opposite to that from which the wind blows.

LEG, *s.* The limb by which animals walk, particularly that part between the knee and the foot in men.

The part of the limb between the knee and the fetlock consists of three bones—a large one before, called the cannon or shank, and two smaller or splint bones behind. The shank-bone is rounded in front, and flattened, or even concave behind. It is the straightest

of the long bones, as well as the most superficially situated, for in some parts it is covered only by the skin. The upper head is flat, with slight depressions corresponding with the lower row of the bones of the knee. The lower head is differently and curiously formed. It resembles a double pulley. There are three elevations, the principal one in the centre, and one on each side; and between them are two slight grooves; and these so precisely correspond with deep depressions and slight prominences in the upper head of the larger pastern, and are so enclosed and guarded by the elevated edges of that bone, that when the shank-bone and the pastern are fitted to each other, they form a perfect hinge: they admit of the bending and extension of the limb, but of no lateral or side motion; which is a circumstance of very great importance in a joint so situated, and having the whole weight of the horse thrown upon it.

The smaller bones are placed behind the larger on either side; a slight projection only of the head of each can be seen in front. The heads of these bones are enlarged, and receive part of the weight conveyed by the lower row of the bones of the knee. They are united to the larger bone by the same kind of substance which is found in the colt between the bone of the elbow and the main bone of the arm; and which is designed, like that, by its great elasticity, to lessen the concussion or jar when the weight of the animal is thrown on them.

Lenitive, *a.* Anything applied to ease pain; a palliative.

Lepidoptera, *s.* An order of insects which have their wings imbricated with scales, as moths, butterflies, &c. &c.

Leporine, *a.* Belonging to a hare, having the nature of a hare.

Leprosy, *s.* A loathsome distemper, which covers the body with a kind of white scales.

Lethargy, *s.* A morbid drowsiness, a sleep from which one cannot be kept awake.

Level, *v.* To aim at, to bring the gun and arrow to the same direction with the mark.

Leveret, *s.* A young hare.

Lick, *v.* To pass over with the tongue; to lap, to take in by the tongue.

Ligament, *s.* A strong compact substance which unites the bones in articulation; anything which connects the parts of the body; bond, chain.

Ligature, *s.* Anything bound on; bandage; the act of binding; the state of being bound.

Lights, *s.* The lungs, the organs of breathing.

Limb, *s.* A member, a jointed or articulated part of animals.

Lime, *s.* A viscous substance drawn over twigs, which catches and entangles the wings of birds that light upon it; matter of which mortar is made; the linden tree; a species of lemon.

Limewater, *s.* Is made by pouring water upon quicklime.

Lime-water is recommended in diabetes. It is made by mixing lime with a large proportion of boiling water, stirring the mixture for some time, and afterwards pouring off the transparent liquor, which is to be carefully excluded from the air.

Limpit, *s.* A kind of shell-fish.

Linchpin, *s.* An iron pin that keeps the wheel on the axletree.

Line, *s.* Longitudinal extension; a slender string used in angling.

The most easy method of making hair into lines is, by a small engine, which is sold at most of the fishing-tackle shops. It consists of a large horizontal wheel, and three very small ones, inclosed in a brass box, about a quarter of an inch thick, and two inches in

diameter; the axis of each of the small wheels is continued through the under side of the box, and is formed into a hook; by means of a strong screw, it may be fixed on any post or partition, and is set in motion by a small winch in the centre of the box; the process is soon acquired, and it is thus used:—Take as many hairs as you purpose the line shall contain, and divide them into three parts; each of these is to be tied to a piece of fine twine doubled, and fixed to the hooks which depend from the machine; then take the piece of lead which has a hook at its top, and after tying the three parcels of hair together at the loose end, hang the weight thereon: after this, cut three grooves in the inside of a cork at equal distances, and in each groove place a division of the hairs, that, by gently turning the engine, the links may turn with a greater evenness to the lead. As the links grow tighter, move the cork slowly upwards, and when the whole is sufficiently twisted, take out the cork and tie the link into a knot, and so proceed till the quantity of links wanted for a line are completed; observing to lessen the number of hairs in each link in such proportion as that the line may be taper. The links should then be laid for an hour into cold water; some persons, whether a hair starts or not, retwist them before they are made into a line, and more particularly when there is an odd hair in the number twisted. Some put the hair for ten minutes into warm water before working it into links.

In making lines, every hair in every link should be equally big, round and even, that the strength may be so proportionate that they will not break singly, but altogether: by carefully choosing the hairs, they will stretch and bear a much stronger force than when a faulty hair is included. Never strain the hair before twisting; the best will easily be selected by the eye, and two or three inches of the bottom part of the hair should be cut off, as it is generally defective. The links should be twisted very slowly, and not lie harsh, but so as to twine one with another, and no more, for a hard twisted line is always weak: by mixing chestnut, black, or any other coloured hair, the line may be varied at pleasure.

* * *

Lines of silk or hemp may be coloured by a strong decoction of oak bark, which it is believed resists the water, and adds to their durability: any shade of an excellent russet brown may be obtained according to the time they remain in the decoction, which should be used cold.

* * *

In leading of lines great care is needful to balance the floats so nicely that a very small touch will sink them. Some use for this purpose lead shaped like a barleycorn, but shot is better; and for fine fishing have a number of small in preference to a few large shot on the line; the lowest of either ought to be nine or ten inches from the hook.

LINE, *v.* To cover on the inside; to put anything in the inside; to cover a bitch.

LING, *s.* Heath; a kind of sea-fish.

LINIMENT, *s.* An application of a consistence rather thicker than oil, or transparent preparations, such as soap liniment.

The following formulæ are given as examples:—

SOAP LINIMENT.

Hard soap	1 oz.
Camphor	1 oz.
Oil of rosemary	1 oz.
Rectified spirit	1 pint.

Cut up the soap, and let it stand with the spirit until dissolved, then add the rest.

AMMONIA, OR VOLATILE LINIMENT.

Strong solution of ammonia	1 oz.
Olive oil	2 oz.—Mix.

To this, camphor, or oil of turpentine is sometimes added; and the solution of ammonia is joined, for some purposes, to the soap liniment. The soap liniment is the same as the celebrated opodeldoc, and may be either solid or fluid, according to the proportion of soap used; but it may be made also with soft soap, and is then fluid with a larger proportion of soap.—*Vide* EGYPTIACUM.

LINIMENT OF CAMPHOR, COMPOUND.

Camphor	2 oz.
Spirit of lavender	1 pint.
Solution of ammonia	6 oz.—Mix.

Solution of ammonia is named also liquid ammonia, and strong spirit of sal ammoniac. —*See* EMBROCATIONS.

LINIMENT FOR BAD THRUSHES AND CANKER.

1. Tar	4 oz.—Melt, and add
Muriatic acid	6 dr.
Verdigris	4 dr.

Mix, and continue stirring until it is cold.

2. Tar, melted	1 lb.
Strong sulphuric acid, by weight	2 oz.

Stir them well together for some time, and immediately before the mixture is used.

Link, *s.* A single ring of a chain; anything doubled and closed together; a chain, anything connecting; any single part of a series or chain of consequences; a torch made of pitch and hards; a thread of gut or horse-hair.

Linnet (*Linaria linota*, Cuvier), *s.* A small singing bird.

This species is subject to much variety with respect to the red markings which, at certain ages and seasons, are found upon the head and breast, and this has occasioned it to be multiplied into two distinct species by various ornithologists, all of whom seem to agree that the general colour of both are alike, but assert that the greater redpole has none of this colour upon the breast. On comparing the various authors who have given this as a distinct species, we find they all make it nearly the same as the redpole, but not quite so rufous on the upper parts. The principal distinction seems to be in the breast being of a fine crimson colour, and none of that colour on the head.

The male in full plumage has the bill bluish; irides hazel; the head light brown; the feathers on the crown darkest in their middle; sides of the neck inclining to ash-colour; the forehead rosy red; the back, scapulars, and coverts of the wings, fine deep rufous brown, lightest on the rump, and palest on the margin of each feather; the breast is brown, with more or less spots like that on the head; belly light rufous brown; vent almost white; quill-feathers dusky black, with more or less white on the exterior and interior webs, which forms a conspicuous bar of that colour on the wing; the tail is forked, the feathers, like those of the quills, black, margined with white, which colour predominates on the inner webs; coverts of the tail black, edged with grey; legs brown. The weight of the male is about five drachms, that of the other sex rather less. The plumage of the female is more dusky brown; the coverts of the wings rufous-brown; sides of the throat plain dirty white, the middle part streaked; breast and sides pale brown, with dusky streaks; quills and tail like the other sex, but the former not so deeply margined with white, and of course no perceptible bar on the wing.

These birds fly in flocks during winter, at which time the males have little or none of the red markings which, on the return of spring, they put forth.

This linnet is very common throughout Britain, extending as far as the Orkneys, where it is abundant. During the summer it resorts to waste land and commons, in the upper parts of the country, where it breeds. Furzy commons seem to be the favourite resorts of these birds during that season; the bushy furze being admirably adapted to conceal the nest from the prying eye, and sometimes a quickset or gooseberry-bush answers the purpose. The nest is composed of moss woven with wool, and lined with wool and hair, very neatly put together; the eggs are four in number, of a bluish white, with a few purplish specks and short lines; their weight from twenty-four to thirty grains. In the month of April they pair, and commence building their nest, and in May the first broods are hatched; but if the nest should be destroyed, they will build another as late as the month of August, appearing dissatisfied until the object of their visit is accomplished. During the time of nidification, and until the young are hatched, the song of the linnet, although short, possesses much sweetness. At once brilliant and soft, the song of the linnet consists of many irregular notes, tastefully put together in a clear and sonorous tone, which continues during the whole year, except at the moulting season. Besides its own natural note, it will soon acquire the notes of other birds, particularly the nightingale; and may be taught in a very short time to imitate any of our tunes, if they are whistled to it. After describing the mature bird, Bechstein says, "a male of three years old is distinguished in the spring, by the name of the red linnet (*Linotte Sanguine*); the forehead is then of a bright blood-red colour; the remainder of the head being of a reddish ash-colour; the top a little speckled with black. After the moulting in autumn, we no longer see the red upon the forehead, that colour being hid by the white feathers; the coverts of the breast then assume a deep brown-colour, and blackish spots begin to appear; the interior feathers on the breast, which were formerly red, are now of a brownish grey, mixed with red. In this plumage it is known by the name of the grey linnet.

"After the time of its second moulting, if we part the reddish grey feathers on the forehead and breast, we find that they are still red at the tips, and only hid by the yellowish white borders of the new feathers."

In this state it is the rock or mountain linnet (*Linotte de Roche*).

I have even," he adds, "had these birds with the forehead and breast of a rich reddish yellow." To this variety bird catchers give the name of the yellow linnet. These varieties of plumage do not occur with the

female, which is besides considerably smaller. In addition to these, there are many changes produced by season and age; for instance, as the bird increases in age, the red colour on the head increases also.—*Bechstein—Selby—Montagu.*

Linseed, *s.* The seed of flax.

Linseed, or flax-seed, abounds with oil and mucilage, and is useful in the composition of those emollient drinks given in inflammations of the bladder and bowels, or complaints of the urinary passages. A strong mucilaginous drink may be made without bruising the seeds, either by decoction or infusion.

Linseed Cake is that part of the linseed which remains after the oil has been pressed out. It is employed to fatten cattle, and is given, occasionally, to horses. When ground it is sold as linseed meal and linseed powder, and often used in the composition of poultices.

Linseed Oil is sometimes employed as a laxative, and, though very inferior to castor, and even olive oil, may be occasionally substituted for it, on account of its being much less expensive. It is used in making pectoral emulsions, liniments, and ointments; but even for these purposes olive oil is preferable, on account of the drying quality of linseed oil.

Lint, *s.* The soft substance commonly called flax; linen scraped into soft woolly substance to lay on sores.

Lip, *s.* The outer part of the mouth, the muscles that shoot beyond the teeth; the edge of anything.

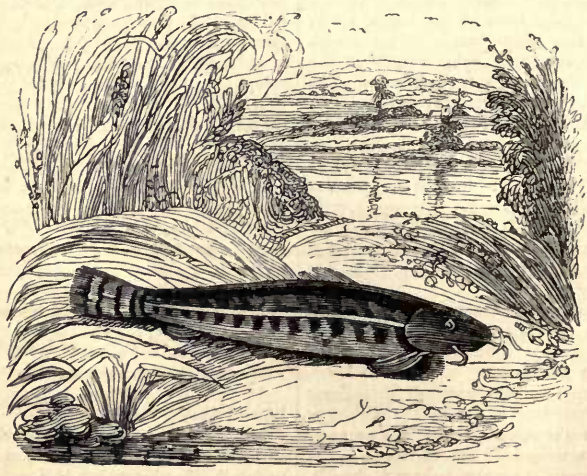
Litter, *s.* A kind of portable bed; a carriage hung between two horses; the straw laid under animals; a brood of young; any number of things thrown sluttishly about; a birth of animals.

Litter, *v.* To bring forth, used of beasts; to cover with things negligently; to cover with straw.

Liver, *s.* One who lives; one who lives in any particular manner; one of the entrails. **Livergrown**, *a.* Having an increased liver.

Lizard, *s.* An animal resembling a serpent, with legs added to it.

Loach, *s.* A little fish.



This little fish is found in small brooks among the gravel, or where there is a soil of mud and gravel together, with weeds, and in several of our rivers by the sides of sharp

streams; it seldom rises to the top of the water, keeping at the bottom on the gravel, upon which it feeds, and is, on that account, in some places, called the groundling; it is frequent in the stream near Amesbury, in Wiltshire, where, out of frolic, the sportsmen swallow it down alive, in a glass of white wine.

It is a slimy fish without scales, and of rather a long make; the mouth is small, placed beneath, and has no teeth; it is bearded like the gudgeon and the barbel, having on the upper mandible six small beards, one at each corner of the mouth, and four at the end of the nose; the body is smooth and slippery, and almost of the same thickness; the colour of the head, back, and sides, is in some white, in others of a dirty yellow, very elegantly marked with large spots, consisting of numberless minute black specks; the pectoral, dorsal, and caudal fins are also spotted; the belly and ventral fins of a pure white; the tail broad, and rather rounded. One of the largest ever heard of by Mr. Pennant, was four inches and three quarters in length, but they seldom exceed three inches. The flesh of the loach is singularly nutritious, and from that circumstance, and its being equally grateful to the palate, it is recommended to the sick. The females, during summer, are generally full of spawn; these fish are to be taken with a very small red worm, the bait touching the ground. The loach is used as a bait for other fish, and for eels perhaps it is the best.

LOAD, *v.* To burden, to freight; to encumber; to charge a gun; to make heavy.

LOAD, *s.* The leading vein in a mine; the charge of a gun.

Loading.—Much as may be said on this important head, I shall attempt to explain it by one simple example: for instance, to load a single gun of six, or double gun of seven, eight, or nine pounds' weight, take a steel charger, which holds precisely an ounce and a half of shot; fill it brimful of powder, from which first prime, and then put the remainder into the barrel; to this add the same measure bumperful of shot, and then regulate the tops of your flasks and belts accordingly.

Some little difference of charge will, of course, be required between a twenty-two and a fourteen gauge; and, in this, we may be guided by the shoulder, observing, at the same time, the proportion of each here recommended: but, unless the gun is very heavy, a gauge of fourteen will recoil more than one of twenty-two; so that, after all, the above charge might do equally well for both.

For those who have scales at hand, another way will be to ascertain this by weight; for instance, to the guns above mentioned, put one drachm and a half of powder, exclusive of priming, to an ounce and a half of shot. The proportion for a twelve pounds' gun to be doubled; eighteen pounds' trebled; twenty-four pounds' quadrupled, &c. with one trifling deviation; viz.—the larger the gun the less should be the proportion of shot, as the larger and longer the calibre the more powder may be damaged in going down it.—*Hawker.*

LOB, *s.* Any one clumsy, or sluggish; a large worm.

LOBE, *s.* A division, a distinct part; used commonly for a part of the lungs.

LOBSTER, *s.* A small crustaceous fish, having a cylindrical body with a long tail and long antennæ. It is found on all the rocky coasts of the United Kingdom.

LOCK, *s.* An instrument composed of springs and bolts, used to fasten doors and chests; the part of the gun by which fire is struck; a hug, a grapple; any enclosure; a quantity of hair or wool hanging together; a tuft; a contrivance to raise the water on a river or canal made navigable.

To dissect a gun-lock.—Place the lock on full cock, screw on the cramp, let down the cock, and the main-spring will fall off; replacing it when necessary, by letting down the cock, hooking the spring, full cocking, and then removing the cramp. I need not detail the mode of taking to pieces the whole of the lock; but I may remind you, that, in separating the cock from the tumbler, the turn-screw should on no account

be placed between the cock and the lock-plate, but a small blow should be struck on the end of the tumbler, which may protrude through the cock, or, if level with it, the end of a turnscrew may be placed upon it, and the other end struck as a punch; while the plate of the lock itself, disencumbered of course of all the other movements, is held in the palm of the left hand, the turnscrew being held in its place by the finger and thumb of the same hand. In inserting the scear, it is well to remember that this is to be done after re-fixing the feather spring, by hooking the end in the tumbler before the re-adjustment of the mainspring, and pressing back the other end by force till the screw is put in its place. This, I confess, is somewhat more difficult than half securing the bridle, and putting on the feather spring last by pushing it into its place when the screw is through it, though not tight; but I like the first-mentioned of these ways the best. Let me recommend you to clarify the oil you use for the purpose of lubricating the locks, by filling the bottle with shot, drawing off the clear oil, and repeating the process again and again at your leisure. See here is some I have had eleven years, and you will observe it is free from that cloudy deposit which oil not thus or otherwise clarified contains, and which is apt to leave a black stain behind it. But we are to be up early—so good night.—*Hints to Sportsmen.*

LOCKJAW, *s.*

Castration, nicking, docking, punctures, particularly of the feet; lacerations, and even contusions, will bring it on. I have seen it follow a fall, which presented nothing more than a moderate contusion in the shoulder. In America, it is not an unfrequent result of castration; and in some tropical climates compression of the cord in the operation must always be avoided, so apt is any irritation to produce it in these regions. It is considered as most apt to follow wounds of tendinous and ligamentous parts.

It commences usually by a certain stiffness about the throat, and difficulty in swallowing, or in turning the head, which soon extends itself to the jaws, and occasions a contracted state of the mouth, with the usual inclination to masticate, but painfully and imperfectly performed. As this increases, the jaws can hardly be separated at all, when farriers say the horse is 'jaw set.' By the tetanic action of the retractor muscle, the haw is drawn partly over the globe, at the same time that the tension of the other ocular muscles gives the eyes a vivid appearance and retroverted aspect, which ill accords with the more placid effect of a protruded haw. As the disease extends over the voluntary muscles of the trunk and extremities, the appearances are distressing in the extreme. The head is raised, the ears pointed forwards, the nostrils dilated, and the nose is carried out. The legs straddle wide, the tail is cocked, and quivers with the constant fatigue of the levator muscles; and the abdominal muscles are drawn tight over the belly, giving to the horse an appearance of having just completed some extraordinary exertion. The complaint presents a few moments of relaxation sometimes, from the extreme and powerful contractions of the overstrained muscles; while profuse sweats mark the distress and exertions of convulsion. The circulation is, in most instances, at first not much affected; but as the disease increases, the pulse quickens, and becomes tremulous and irregular. The respiration also gradually becomes hurried and irregular; costiveness is usually present, and the urine is sparingly made. In this state the suffering animal may remain from six to ten days, when, worn out by inanition and irritation, he often falls lifeless, or expires after a short state of convulsion.

The general curative practice in tetanic cases among veterinarians, foreign and English, of the present day, leans to the free use of the lancet, to complete opening of the bowels, and to a liberal administration of opiates, as being every one of them powerful antispasmodics singly, but in this painful affection proving doubly so conjointly; to which are added, blistering the spine; and the beneficial effects of this practice, as exemplified by experience, warrant its being at once proceeded on to the exclusion of every other, until it has totally failed.—*Blaine.*

LODGE, *s.* A small house in a park or forest; a keeper's hut.

LOGGATS, *s.* A play or game, now called skittles.

LOGWOOD, *s.* A wood much used in dyeing.

LOIN, *s.* The back of an animal; loins, the reins.

The loins occupy the attention of all good judges in their consideration of a horse, and for the purposes of strength they can hardly be too broad: the back extends to the posterior part of a common sized saddle, and where the back ends, the loins begin. Sometimes, from a defect in the sacral processes of the vertebræ, this junction of the back and loins

presents an indentation, as though the union was incomplete. This may be considered, in some degree, as a defect, inasmuch as it deprives the part of muscular attachment, and such horses are said to be badly loined. The strength of the loins depends on the length of the transverse processes of the lumbar vertebræ, which should be long, that there may be an extensive surface for the attachment of the muscles of the back: the muscles themselves should also be powerful on each side, giving width to the loins, and seeming by their enlargement, as it were, to swallow the back bone. When the protuberances of the ilium are very prominent, the horse is called ragged hipped, which is injurious to the appearance only, except in cases where it seems to arise from a paucity of muscle to fill up the intervening spaces. From the loins to the setting on of the tail, the line should be long and very slightly rounded; by which means, also, the distance between the hip and the point of the buttock will be considerable. This formation is peculiar to the improved or blood breed, and in every point of view appears the most perfect; for it affords a very increased surface for the insertion of the powerful muscles of these parts.—*Blaine.*

Longopen, *s.* The second long feather in the hawk's wing.

Loo, *s.* A game at cards.

Loo or lue, subdivided into limited and unlimited loo, a game, the complete knowledge of which can be easily acquired, is played with five or three cards, though most commonly with five, dealt from a whole pack, either first three and then two, or by one at a time. Several persons may play together, but the greatest number can be admitted when played with three cards only.

After five cards have been given to each player, another is turned up for trump; the knave of clubs generally, or sometimes the knave of the trump suit, as agreed upon, is the highest card, and styled Pam; the ace of trumps is next in value, and the rest in succession, as at whist. Each player has the liberty of changing for others from the pack all or any of the five cards dealt, or of throwing up the hand in order to escape being looed. Those who play their cards either with or without changing, and do not gain a trick, are looed; as likewise is the case with all who have stood the game, if a flush occur, which obliges each, except a player holding Pam, or an inferior flush, to deposit a stake to be divided among the winners at the ensuing deal, according to the tricks which may then be made. For instance, if every one at dealing should stake half-a-crown, the tricks are entitled to sixpence apiece, and whoever is looed must put down half-a-crown, exclusive of the deal: sometimes it is settled that each person looed shall pay a sum equal to what happens to be on the table at the time. Five cards of a suit, or four with Pam, compose a flush, which sweeps the board, and yields only to a superior flush, or an equal one in the elder hand. When the ace of trumps is led, it is usual to say "Pam be civil," the holder of Pam is then expected to let the ace pass.

When loo is played with three cards, they are dealt by one at a time, Pam is omitted, and the cards are not exchanged, nor permitted to be thrown up.—*Hoyle.*

Loom, *s.* A bird.

Loop, *s.* A double through which a string or lace is drawn, an ornamental double or fringe. Loops or Rings are placed along the fishing rod to conduct the line from the reel to the upper extremity.

Lord-warden, *s.* An officer in forestry.

Under him are two distinct appointments of officers, the one to preserve the venison of the forest, and the other to preserve its vert: the former term, in the language of the forest law, comprehends every species of game; the latter signifies every thing that bears a green leaf within a forest that may cover a deer, but especially great and thick coverts.

Lore, (*Lorum*, Linn.) in ornithology, is the space between the bill and the eye, which in the grebe genus is bare, but in other birds is generally covered with feathers.

Lorimer or Loriner, *s.* Bridle cutter.

Lot, *s.* Fortune; a chance; a die, or anything used in determining chances.

Lough, *s.* A lake, a large inland standing water.

Lowbell, *s.* A kind of fowling in the night, in which the birds are awakened by a bell, and lured by a flame.

Lowland, *s.* The country that is low in respect of neighbouring hills.

Lubricitate, *v.* To smooth, to make slippery.

Luck, *s.* Chance, accident, fortune, hap; fortune, good or bad.

Lug, *s.* A land measure, a pole or perch; a worm found by digging in oozy sand, an excellent bait for flat fish; the sail of a lugger.

Lugger, *s.* A fast-sailing vessel with three masts, much used for smuggling and privateering. They vary in size from fifty to one hundred and fifty tons, and are useful vessels for any purposes requiring dispatch.

The lugger is, I think, the most inconvenient rig, especially for a yacht; the spars are so heavy that they require all hands to move them. They generally have two sets of lugs —large ones, which require dipping every time you tack; and small working lugs, which do not require dipping, the tack coming to the foot of the mast. The latter are generally used, except in making long reaches, as across Channel, &c. &c.

Another great objection to a lugger is, your decks are so encumbered with the spare spars and sails, which take up a great deal of room; besides the latter being exposed almost continually to the weather, which they must be while kept bent ready for setting; and, thirdly, a lugger is seldom fit to be altered to any thing but a schooner, not having breadth enough for one mast, which, after all, for beauty and speed, is the best: indeed, sailing men are so perfectly aware of this now, that you never see a schooner or lugger enter against a cutter at all near their tonnage. Take them to sea, and they might have a chance; though even there (setting aside accidents) I would back the cutter in a trial; but in fine weather or smooth water there is no comparison.—*Sport. Mag.*

Lumpfish, *s.* A sort of fish.

Lunar, *a.* Relating to the moon, under the dominion of the moon.

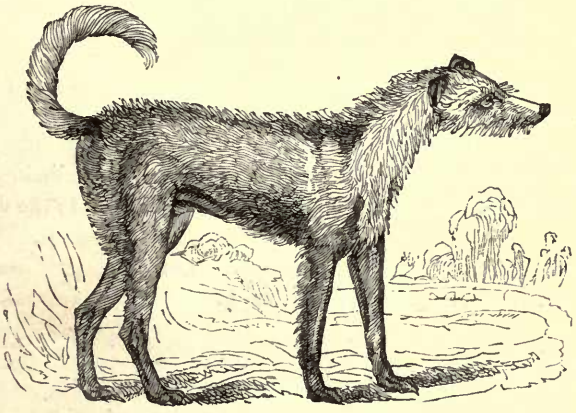
Lungs, *s.* The lights, the organs of respiration.

Each side of the cavity of the chest is occupied by soft, spongy, and slightly elastic masses, called lungs, having the heart appended between them. In a state of distension they completely fill the parietes of the thorax, to which their figure is exactly adapted. The lungs have a distinct division into a right and left mass, each of which presents deep fissures, partially dividing its substance into what are called its lobes. These divisions are not always the same in every subject, but in the majority of instances the right and largest lung presents three lobuli, the left two only. As already described, the pleura first lines the thoracic cavity, and is then reflected over the lungs, affording them a dense covering: a second reflection from each lung by a union of its laminæ, forms a septum, or a complete division of the chest, into two distinct cavities, and thus effectually shuts out all communication between one lung and the other, except by their vessels. The colour of the lungs varies considerably: in the colt they present a lively pinky hue; in the adult horse they are darker, and in very old subjects they have a greyish cast and granulated appearance.—*Blaine.*

Lurch, *s.* A term at cards.

Lurch, *v.* To win two games instead of one at cards.

Lurcher (*Canis indagator*), *s.* A dog.



This variety is smaller than the greyhound, with its limbs stronger and shorter, the head less acute, with short, erect, and half-pricked ears; the whole body and tail are covered with rough coarse hair; it is grizzly about the muzzle, and is of a pale sand colour, or iron grey.

The lurcher is supposed to be originally produced, first, by a cross of the greyhound and harrier, and afterwards re-crossed with the terrier; hence the quickness of his scent, which he possesses in a strong degree. The habits of this dog lead him to concealment and cunning; and he is often employed in killing hares and rabbits under the cloud of night, for which nature seems eminently to have fitted him. When taken to the warren, he lies squat, or steals out with the utmost precaution, when he either sees or scents the rabbits feeding, and, like his progenitor, the greyhound, darts upon them with exceeding quickness, without barking or making the least noise. He is trained to bring the booty to his master, who often waits at some distance to receive it. One of these dogs will kill a great many rabbits in the course of a night. Bewick says, that they were so destructive, that they are now with great propriety proscribed, and the breed is almost extinct.

Lure, *s.* Something held out to call a hawk; any enticement.

The use of this important implement in breaking falcons, is thus described by Sir John Sebright:—

The hawk is to be fed upon the lure, being first made to come to it when held very near him, then when held a little farther off; it is to be next thrown upon the ground to a small distance, and thus he is to be brought by degrees to fly to it, and to seize it eagerly, however far it may be thrown.

An assistant is now to swing the lure at some distance from the falconer, who casts off the hawk.

It is to be thrown into the air when the hawk is flying towards it. but so that he cannot attain it until it falls to the ground, lest he should be hurt by striking it in his flight.

When this lesson has been repeated, until the hawk has become eager to take the lure, the assistant is to swing it as before, but is to take it into his hand when the hawk is coming; he is then to swing it again as soon as the hawk has passed; and finally, to throw it upon the ground, when the hawk is returning towards him.

In this way the hawk will soon be taught to fly round the falconer, bending his flight inwards when the lure is shown to him, or when he hears the call of the falconer, who should always halloo when he is luring. He may thus be made to follow the falconer wherever he pleases; this is called waiting on.

When the hawk has alighted upon the lure, the falconer is to walk round him, whistle to him while he is feeding, and reward him with a good meal when he is taken up.

It is thus that hawks are made obedient to the lure, and that they are exercised when they cannot be flown at game, but they must not be kept too long upon the wing, or they would acquire the habit of flying low; and it is the perfection of a slight falcon to soar as high as possible.—*Sebright.*

Lurid, *a.* Gloomy, dismal; a yellow colour bordering on a blue.

Lurk, *v.* To lie in wait, to lie hidden, to lie close.

Lurkingplace, *s.* Hiding place, secret place.

Lustre, *s.* Brightness, splendour, glitter; a sconce with lights; the space of five years.

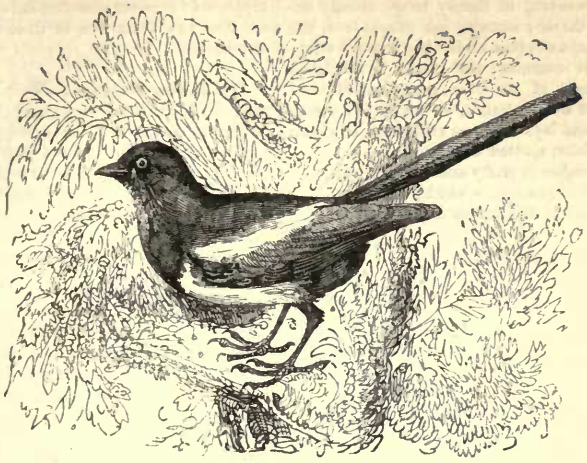
Lusty, *a.* Stout, vigorous, healthy, able of body.

Luxate, *v.* To put out of joint; to disjoint; to displace a limb.

Luxation, *s.* The act of disjointing; anything disjointed; the displacing a limb.

Luxuriant, *a.* Exuberant, superfluous, plenteous.

Lymphatic, *s.* A vessel containing lymph.



THE MAGPIE.

MACAW, *s.* A foreign bird of the parrot kind; its plumage is very splendid, and its feathers valuable in tying salmon flies. Shop flies are frequently tied with imitation feathers, which, on exposure to the sun, become faded and useless.

MACKEREL, *s.* A sea fish. *Vide* SEA FISHING.

MACKEREL-GALE, *s.* A strong breeze, favourable for killing mackerel.

MAD, *a.* Disordered in the mind; enraged, furious.

MADNESS, *s.* Distraction; fury, wildness, rage. *Vide* HYDROPHOBIA.

MAGGOT, *s.* A small grub which turns into a fly.

MAGNETIC, *a.* Relating to the magnet; having powers correspondent to those of the magnet; attractive, having the power to draw things distant.

MAGPIE or PIANET (*Corvus pica*, LINN.; *La Pie*, BUFF.) *s.* A bird.

Its length is about eighteen inches; bill strong and black; eyes hazel; the head, neck, and breast are of a deep black, which is finely contrasted with the snowy whiteness of the under parts and scapulars; the neck-feathers are long, as are also those on the back, which extend towards the rump, leaving only a small space, of a greyish ash-colour, between them and the tail coverts, which are black; the plumage in general is glossed with green, purple, and blue, which catch the eye in different lights; the tail is very long, and rather wedge-shaped; the under-tail coverts, thighs, and legs are black: on the throat and part of the neck there is a kind of feathers, mixed with the others, resembling strong, whitish hairs.

This beautiful bird is everywhere common in England; it is likewise found in various parts of the continent, but not so far north as Lapland, nor farther south than Italy: it is met with in America, but not commonly, and

is migratory there. It feeds, like the crow, on almost every thing animal as well as vegetable. The female builds her nest with great art, leaving a hole in the side for her admittance, and covering the whole upper-part with an interweaving of thorny twigs, closely entangled, thereby securing her retreat from the rude attacks of other birds: but it is not safety alone she consults; the inside is furnished with a sort of mattrass, composed of wool and other soft materials, on which her young repose: she lays seven or eight eggs, of a pale green-colour, spotted with black.

The magpie is crafty and familiar, and may be taught to pronounce words, and even short sentences, and will imitate any particular noise which it hears. It is addicted, like other birds of its kind, to stealing, and will hoard up its provisions. It is smaller than the jackdaw, and its wings are shorter in proportion; accordingly its flight is not so lofty, nor so well supported: it never undertakes long journeys, but flies only from tree to tree, at moderate distances.

* *

To destroy magpies.—Wait till the female sits hard on her eggs; and then go, late in the evening, with some large shot in a duck-gun, by which means you may either take her as she flies out of the tree, or blow up the whole concern by firing through the nest.—*Bewick*—*Hawker.*

MAGPIE HAWKING, *s.*

Magpies may be flown with eyess slight falcons, and afford excellent sport.

A down or common, where low trees or thorn bushes are dispersed at the distance of from thirty to fifty yards apart, is the place best calculated for this diversion.

When a magpie is seen at a distance, a hawk is immediately to be cast off. The magpie will take refuge in a bush the moment that he sees the falcon, and will remain there until the falcon arrives, with the hawk waiting on in the air. The magpie is to be driven from his retreat, and the hawk, if at a good pitch, will stoop at him as he passes to another bush, from whence he is to be driven in the same way, another hawk having been previously cast off, so that one or the other may always be so situated as to attack him to advantage.

The second hawk is necessary, for the magpie shifts with great cunning and dexterity to avoid the stoop; and when hard pressed, owing to the bushes being rather far apart, will pass under the bellies of the horses, flutter along a cart rut, and avail himself of every little inequality of the ground in order to escape.

Four or five assistants, besides the falconer, (who should attend solely to his hawks) are required for this sport. They should be well mounted and provided with whips; for the magpie cannot be driven from a bush by a stick; but the crack of a whip will force him to leave it, even when he is so tired as hardly to be able to fly. Nothing can be more animating than this sport; it is, in my opinion, far superior to every other kind of hawking. The object of the chase is fully a match for its pursuers—a requisite absolutely necessary to give an interest to any sport of this kind; and it has the advantage of giving full employment to the company, which is not the case in partridge-hawking.

The magpie will always endeavour to make his way to some strong cover; care, therefore, must be taken to counteract him, and to drive him to that part of the ground, where the bushes are farthest from each other. It is not easy to take a magpie in a hedge. Some of the horsemen must be on each side of it; some must ride behind, and some before him; for, unless compelled to rise, by being surrounded on all sides, he will flutter along the hedge, so as to shelter himself from the stoop of the falcon. Many requisites are necessary to afford this sport in perfection—a favourable country, good hawks, and able assistants.—*Sebright.*

MAID or MAIDEN-RAY, *s.* A species of skate fish. They are amazingly plenty on the North West Coast of Ireland, and only used as food by the poorer classes.

MAIZE, *s.* Indian wheat.

MALANDERS, *s.* A dry scab on the pastern of horses.

Malanders is a disorder that attacks the back part, or flexure, of the knee joint, and depends upon a combination of mange and grease. It appears as a scurfy or scabby eruption, and is often very painful, causing some degree of lameness from the pain the animal feels in moving the joint. Sometimes it is not so considerable as to produce lameness, or any apparent inconvenience, but generally becomes troublesome and obstinate unless attended to. Salanders occur in the fore part, or flexure, of the hock joint, and are of the same nature as malanders. They should first be well washed with soap and

water, and all the scurf and loose cuticle completely removed. They may then be cured by the following ointments :—

OINTMENT FOR MALANDERS AND SALANDERS.

No. 1. Ointment of nitrate of mercury, commonly named citrine ointment.

No. 2. Hog's lard, two ounces; red precipitate, finely powdered, two drachms.

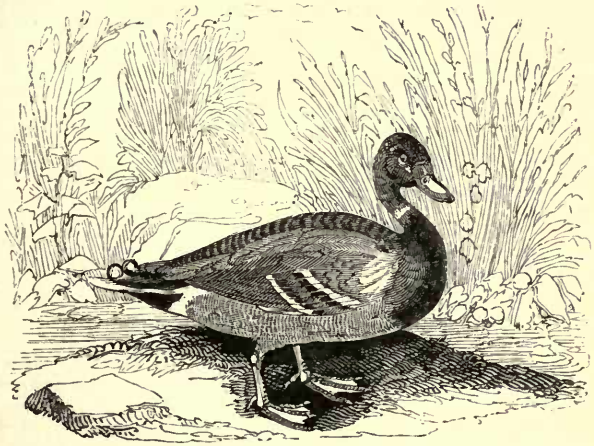
No. 3. Hog's lard, four ounces; melt, and stir in Goulard's extract, one ounce.—*White.*

MALE, *a.* Of the sex that begets young, not female.

MALE, *s.* The he of any species.

MALEFEATHERS, *s.* Those on the breast of a hawk.

MALLARD, *s.* The drake of the wild duck.



The mallard, or wild-drake, weighs from thirty-six to forty ounces, and measures twenty-three inches in length, and thirty-five in breadth: the bill is of a yellowish-green colour, not very flat, about an inch broad, and two and a half long, from the corners of the mouth to the tip of the nail: the head and upper-half of the neck, are of a glossy, deep, changeable, green, terminated in the middle of the neck by a white collar, with which it is nearly encircled: the lower part of the neck, breast, and shoulders, are of a deep vinous chestnut: the covering scapular feathers are of a kind of silvery white; those underneath, rufous; and both are prettily crossed with small waved threads of brown: wing-coverts ash; quills brown; and between these intervenes the beauty-spot (common in the duck tribe) which crosses the closed wing in a transverse, oblique, direction; it is of a rich, glossy, purple, with violet or green reflections, and bordered by a double streak of black and white. The belly is of a pale grey, delicately pencilled and crossed with numberless narrow-waved, dusky lines, which, on the sides and long feathers that reach over the thighs, are more strongly and distinctly marked: the upper and under tail-coverts, lower part of the back, and rump, are black; the latter glossed with green: the four middle tail-feathers are also black, with purple reflections, and, like those of the domestic drake, are stiffly curled upwards; the rest are sharp pointed, and fade off to the exterior sides, from a brown to a dull white; legs, toes, and webs red.

The plumage of the female is very different from that of the male, and partakes of none of his beauties, except the spot on the wings. All the other parts are plain brown, marked with black. She makes her nest, lays from ten to sixteen greenish-white eggs, and rears her young generally in the most sequestered mosses or bogs, far from the haunts of man, and hidden from his sight among reeds and rushes. To her young helpless unfledged family (and they are nearly three months before they can fly), she is a fond, attentive, and watchful parent, carrying or leading them from one pool to another, as her fears or in-

clinations direct her; and she is known in this country to use the same wily stratagems to mislead the sportsman and his dog, as those before noticed respecting the partridge.

Like the rest of the duck tribes, the mallards, in prodigious numbers, quit the north at the end of autumn, and, migrating southward, arrive at the beginning of winter in large flocks, and spread themselves over all the loughs and marshy wastes in the British isles. They pair in the spring, when the greatest part of them again retire northward to breed; but many straggling pairs stay with us: they, as well as preceding colonists of their tribes, remain to rear their young, who become natives, and continue with us throughout the year.—*Bewick.*

MALLEABLE, *a.* Capable of being spread by beating.

MALMSEY, *s.* A sort of grape; a kind of wine.

MALT, *s.* Grain steeped in water and fermented, then dried on a kiln.

Malt is very serviceable to horses that are recovering from fever: it is useful, also, when the system is weakened by large abscesses which discharge copiously, and in almost every case depending on debility.

It appears to be easy of digestion, and very nutritious, though not so stimulating as oats. Green malt has been recommended for improving the condition of horses, and giving them a smooth, glossy coat. Infusion of malt is sometimes given with advantage to sick horses; but they generally require to be drenched with it, which is a great inconvenience.—*White.*

MALT, *v.* To make malt.

MAMMALIA, *s.* The first class of animals in the system of Linnæus.

MANAGE, *v.* To carry on; to train a horse to graceful action; to tame or break hawks in.

MANCHINEEL, *s.* A large tree, a native of the West Indies; a dyewood.

MANDIBLE, *s.* The jaw, the instrument of manducation.

MANE, *s.* The hair which hangs down on the neck of horses.

When a horse's mane stares or lies irregularly, it should be neatly platted; leaded at the ends, and kept damp with a wet sponge.

MANED, *a.* Having a mane.

MANGE, *s.* The itch or scab in cattle.

The canine mange is a chronic inflammation of the skin, dependent, in some instances, on a morbid constitutional action: it is infectious also, from miasms produced from animal exhalations; and it is notoriously contagious from personal communication with one affected. It is not, however, so completely contagious, in all its varieties, as is supposed, for I have known dogs to sleep with affected ones for some time without becoming mangy; but in the majority of cases it is otherwise; and in some the predisposition to it is such, that almost simple and momentary contact will produce it. The mange which is received by contagion is more readily given to another than that which is generated. The uniform presence of animalculi within the psoric pustules has revived the idea that it originates in the attack of acari.

Mange is also hereditary. A bitch, lined by a mangy dog, is very liable to produce mangy puppies; but the progeny of a mangy bitch is certain to become affected sooner or later; and I have seen puppies covered with it when a few days old. The morbid action by which mange is generated is excited in various ways, and by various causes. When a number of dogs are confined together, the acrid effluvia of their transpiration and urine begets a miasm productive of a virulent mange, very difficult to be removed. Close confinement, with salted food, is even more certainly productive of mange; thus dogs who have come from distant countries, on ship-board, are generally affected with it. Very high living, with little exercise, is a frequent cause: a state nearly approaching to starvation is also not unfavourable to it. In both these apparent contrarieties, the balance between the skin and the digestive functions is not preserved, and the disease follows as a necessary consequence. The disease has some permanent and fixed varieties; it has also some anomalies; but the pruritus or itching is common to all.

The scabby mange, one of the most common forms under which this eruptive complaint appears, is an extension of the secretory pores of the skin in very minute red vesicles,

that at first are distinct, but as they extend become pustular, confluent, and scabby. Sometimes simple linear cracks of the cuticle seem to pour out a serous fluid, which concretes into scab. It is occasionally confined to the back; at others it is found principally in the joints of the extremities.

* * *

The red mange, so called from a redness of both skin and hair in the parts affected, is likewise not unfrequent, and partakes much of an herpetic character. In this variety there is less pustular eruption, but nearly the whole skin of the body, particularly in white-haired dogs, is in a state of active inflammation: it is also hot to the feel, and itches intolerably. In the red mange, the hair itself becomes morbidly affected, and alters in its colour, particularly about the extremities: it also falls off, and leaves the skin bare, much thickened, and puckered into stubborn wrinkles. Dogs with the strong coarse hair called wired are very liable to this state; in which a magnifying glass applied will often detect innumerable minute ulcerations, covered by furfuraceous scales. * * *

Acute mange.—Besides that variety just noticed, there is yet a more directly acute form of the complaint, which puts on an appearance not unlike erysipelas in some instances; in others it is a pure erythema, or red efflorescence; but more frequently it is accompanied with some ulceration. It commences by a direct febrile attack, with panting heat, and restlessness; next some part of the body (usually the head) begins to swell, which, the second or third day, gives place to ulceration of the nose, eyelids, lips, ears, neck, &c. This ulceration proves superficial, but extensive; and continues a longer or a shorter period, as the treatment is more or less judicious. Bleeding, aperients, and febrifuges, form the constitutional remedies: the topical ones are tepid fomentations the first two days; and, when the tumefaction has given place to ulceration, the application of a cooling unguent of superacetate of lead (sugar of lead), with spermaceti ointment, will be proper. What remains of the affection, in a week or ten days' time, may be treated as common mange.

* * *

Mange is apt to be considered more troublesome than hurtful, which is a great error; for it is not only invariably hurtful, but very often fatal also: when long continued, it frequently ends in dropsy. It sometimes diseases the mesenteric glands, and the subjects of it die tabid: neither in any case can it be neglected with impunity. In sporting dogs it is injurious to their qualities as well as their health: their scent invariably becomes impaired, and their general powers are always weakened by its irritation.

The following formulæ are adapted for the first described form of mange:—

No. 1. Powdered sulphur, yellow or black . . 4 oz.
Muriate of ammonia (sal ammoniac), crude powdered . . ½ oz.
Aloes, powdered . 1 dr.
Venice turpentine . ½ oz.
Lard, or other fatty matter 6 oz.—Mix.

Or,

No. 2. Tobacco in powder . ½ oz.
White hellebore in powder ½ oz.
Sulphur in powder . 4 oz.
Aloes in powder . 2 dr.
Lard, or other fatty matter 6 oz.

Or,

No. 3. Powdered charcoal . 2 oz.
Sulphur powdered . 4 oz.
Potash . . 1 dr.
Lard, &c. . . 6 oz.
Venice turpentine . ½ oz.

Or,

No. 4. Sulphuric acid (oil of vitriol) . . . 1 dr.
Lard . . . 6 oz.
Tar . . . . 2 oz.
Powdered lime . . 1 oz.

Or,

No. 5. Decoction of tobacco . 3 oz.
Decoction of white hellebore . . . 3 oz.
Oxymuriate of quicksilver (corrosive sublimate) . . 5 gr.

Dissolve the corrosive sublimate in the decoctions, which should be of a moderate strength; when dissolved, add two drachms of powdered aloes, to render the mixture nauseous, and prevent its being licked off, which ought to be very carefully guarded against: the best means for this purpose is a muzzle having a very fine wire capping or mouthpiece, which will effectually prevent the dog from getting his tongue applied to the ointment, which would prove his almost certain destruction.

The formulæ for red mange are as follow:—

No. 6. Of either of the ointments already prescribed, 1, 2, or 3 . . 6 oz.
Mercurial ointment, mild 1 oz.—Mix.

Or,

No. 7. Powdered charcoal . 1 oz.
Prepared chalk . . 1 oz.
Superacetate, or sugar of lead . . . 1 dr.
White precipitate of quicksilver . . . 2 dr.
Sulphur . . . 2 oz.
Lard . . . 5 oz.

In some cases, the mange ointment, No. 4, alternated with No. 6, one being used one day, and the other the next, will be found beneficial. In others, benefit has been derived from the wash, No. 5, united with lime water. In slight cases of red mange, the following has been found singularly successful:

No. 8. Oxmuriate of quicksilver (corrosive sublimate) powdered . . 6 gr.
Sulphuretted potash (liver of sulphur . . ½ oz.
Lime water . . 6 oz.—Mix.

The third variety requires a considerable difference in the treatment. When the little spongy openings, piercing the cellular tissue, will admit of it, they should be injected, by means of a very minute syringe, with the wash No. 8. The general surface should also be anointed with the following:

No. 9. Ointment of nitrated quicksilver . . 2 dr.
Superacetate of lead . 1 scruple.
Washed flowers of sulphur . . . ½ oz.
Lard . . . 1 oz.—Mix.

* * *

For the Red Mange.—Two ounces of white hellebore in powder, mixed in one quart of the grounds of strong beer, made warm; rub the dog well all over, and dry it in with a good fire; be careful that it does not touch his eyes: put the dog in a warm place, and keep him from water four hours after the application.—*Blaine.*

MANGEL WURZEL, *s.* A kind of beet, shaped like a carrot, but larger. It is excellent fattening winter fodder. In Germany it has been used for human food in times of scarcity; hence its name, which literally means "the root of scarcity."—*Crabbe.*

MANGER, *s.* The place or vessel in which animals are fed with corn.

MANGINESS, *s.* Scabbiness, infection with the mange.

MANTLING, *s.* In falconry, the lowering of a hawk's feathers down to her feet.

MAPLE-TREE, *s.* A tree frequent in hedge-rows.

Maple is much used in making gun-stocks, and, from the closeness of its grain, and its being susceptible of a high polish, is generally preferred by gun-makers to every other wood. Of late, to stain stocks black has become very fashionable, and come into general use among the leading gun-makers.

MARE, *s.* The female of a horse.

MARITIME, *a.* Performed on the sea, marine; relating to the sea, naval; bordering on the sea.

MARK, *s.* A token by which anything is known; anything at which a missile weapon is directed; the evidence of a horse's age; a sum of thirteen shillings and fourpence; a character made by those who cannot write their names.

MARKSMAN, *s.* A shot; a man skilful to hit a mark.

MARL, *s.* A kind of clay, much used for manure.

MARROW, *s.* An oleaginous substance contained in the bones.

MARSH, *s.* A fen, a bog, a swamp; a morass; a snipe haunt.

MARSH MALLOW, *s.* A plant useful in making mucilaginous or emollient drinks, clysters, or fomentations.

The root is the best part, and, if carefully dried, may be kept a long time. These mucilaginous drinks are useful when the bowels or bladder are inflamed or irritated by strong

physic, or when there is any pain in the urinary passages. They should be given frequently in the course of the day, and may occasionally be made the vehicle for more active medicines. Any thing which contains mucilage in sufficient quantity may be employed for the purpose of making emollient drinks.—*White.*

MARSHY, *a.* Foggy, fenny, swampy; produced in marshes.

MARTEN, *s.* A large kind of weasel, whose fur is much valued; a kind of swallow that builds in houses, a martlet.

This is the most beautiful, and the most destructive to pheasants, of the British beasts of prey. The marten is about eighteen inches long, the tail ten, or, if measured to the end of the hair at the point, where it is also the thickest and darkest, twelve inches; the head is small, and elegantly shaped: the eyes are lively, and all its motions agile and graceful; the ears are broad, rounded and open; the back, sides, and tail, are covered with a fine thick ash-coloured down at bottom, with long hair intermixed, of a bright chestnut, tipped with black, giving a darkish brown appearance to the whole; the head brown, with a slight cast of red; the legs and upper side of the feet, chocolate—the under sides are covered with similar thick down, to the body; the feet are broad; the claws white, large, and sharp, but incapable of being, at pleasure, sheathed or dilated; they are well suited for climbing trees, in which, in this country, it constantly resides: the throat and breast are white; belly of the same colour with the back, except being rather paler; but martens vary in their colours, inclining, more or less, to ash colour, according to their age, or the seasons of the year they are taken in.

The skin and excrements of this animal have an agreeable, musky scent, and are free from that disgusting rankness which distinguishes the other species of this genus, as the pole-cat, &c. The fur is valuable, and much used to line or trim the gowns of magistrates, aldermen, &c. The marten lives in the woods, and in winter very often shelters itself in magpies' nests, breeds in the hollows of trees, and brings from four to six young ones at a time; they are brought forth with their eyes unopened, but quickly arrive at a state of perfection. The female has but a small quantity of milk in proportion to her size, but she amply compensates for this natural defect by bringing home eggs and live birds to her offspring, thus early habituating them to a life of carnage and plunder. As soon as the young are able to leave the nest, they are led by the dam through the woods, where the birds at once recognise their enemies, and fail not to attend them, as they do the fox, with every mark of animosity and terror. When taken young, the marten is easily tamed, is extremely playful and good-humoured; its attachment, however, is not to be relied on if it gets loose, for it will immediately take advantage of its liberty, and retire to the woods, its natural haunts. A farmer in the parish of Turling, in Essex, was famous for taming this animal, and had seldom less than two. Some years since, one used to run tame about the kitchen of the Bald-faced Stag inn, on Epping forest.

M. Buffon affirms of a marten that he had tamed (it should seem but imperfectly), that it drank frequently, sometimes slept two days successively, and at other times continued as long awake. When preparing for sleep, it folded itself round, covering its head with its tail. He describes its motions as so violent, incessant, and troublesome, that it was necessarily kept chained. After escaping from its fetters, and returning once or twice, it at last went entirely away.

The pine marten (whose skin is considered of a far superior quality to the common), which is distinguished by a yellow throat and breast, and of which such numbers are sold at the Hudson's Bay Company's sales—at one of which, 12,370 good skins, and 2360 damaged ones, were sold; and about the same time the French brought into the port of Rochelle, from Canada, no less than 30,325 skins—is sometimes found in Wales, in the counties of Merioneth and Carnarvon. In Scotland it is the only kind of marten; where it inhabits the fir forests, frequently usurping the drays or nests of the squirrel, building its own nest at the top of the trees, and produces seven or eight young at a birth.

The marten's food is poultry, game, and small birds; it will not eat mice, rats, and moles, and is said to feed also on grain, and to be extremely fond of honey. It is said to be a great enemy to cats, and will even attack the wild cat, which, although much stronger, is always worsted, and often killed in the combat, and a contest is sure to take place whenever they meet.

The scent of the marten is very sweet to hounds, and it is the best animal to enter young fox-hounds at. The marten, by running to the thickest bushes it can find, teaches hounds to run cover, which is of infinite service to them. When closely pursued, it climbs a tree, and its agility is astonishing, for though it falls frequently from a tree into the midst of a pack of hounds, each intent on the catching it, the instances are very few of

a marten being caught by them in that situation. They are not found in any great numbers; the most ever met with by the compiler, was in the large woods near Rayleigh, in Essex.

They attack the pheasants when at roost, and make great havoc. The steel trap, baited with a piece of pheasant or wood-pigeon, will generally be successful. Some prefer the box trap (such as is used in warrens), which should be baited with a bird in the centre, and the feathers strewed through the inside of the trap, from one end to the other; but a more certain way of catching them, in a park or cover paled in, is the following: as they constantly run the pales and posts to dry themselves in the morning, have a groove cut in some of the posts and gate-posts where they run, sufficient to contain a strong hawk or rat-trap; the trap must be set in this groove, without a bait: in leaping upon the place, they are sure to be taken. A small chain should be fixed to the trap, and fastened to the post.

The common house cat, turned wild, is another mortal foe to pheasants, and does more mischief than many sorts of naturally wild vermin. In Moulsham Thrift, a large cover belonging to Sir H. St. John Mildmay, sixteen of these animals were killed by a pack of fox-hounds, in four days, drawing the cover for foxes. They may be destroyed in traps, like the marten; but the bait must be sprinkled with valerian, and if the hutch or box-trap be used, valerian should be scattered in and about the trap, which will certainly allure them, for of this drug they are immoderately fond.

Another way to take either the wild or the pole cat, is to set box-traps in the bottom of the ditches, or under walls or pales, with the ends of the traps fenced up, for four or five yards aslant, and two or three yards wide at the entrance, with earth, bushes, or broken pales, so that the vermin shall not pass without entering the traps. This is the method used by warreners. When the traps are so placed, a trail of rabbits' paunches should be drawn from one trap to another, and the baits are red herrings half broiled. Each end of the traps is to be rubbed with them, and a part of the herring is to be afterwards hung upon the nail over the bridges of the traps. This is a mode that will cause great destruction amongst them. A thin bag, sufficiently large to admit an end of the trap, is to be provided and slipped over it, when any of the traps are sprung, and by rattling at the other end of the trap, the creature will spring into the bag; for without precaution, if it be a wild cat, the moment the light is admitted, it will fly in the face of the person opening it. By having both ends of the box-traps painted white, and rubbed over with the entrails of any animal, the hares will be deterred from entering, at the same time it will allure the vermin to go into the traps.

MARTLET, *s.* A kind of swallow; the bank swallow.

Industry of Birds.—Dr. Steel, who lives near the mineral springs of Saratoga, in New York, has ascertained that the bank swallow (*hirundo riparia*) knows how to vary, according to necessity, the construction of its nest. If it finds sandy banks, it bores holes in them, and thus forms for its future family a commodious habitation, into which none of their enemies can enter. When this resource is wanting, it approaches the houses, and, although less accustomed to man than the swallow of the windows, it attaches its nest to granaries, farm-yard sheds, and similar edifices; and then, it being necessary to build instead of to dig, it selects materials, transports them, and puts them in their proper places. It thus appears that this species of swallow has not essentially the habits indicated by its specific name; but that it will live contentedly wherever it can find food, safety, and the charms of society; for isolated families, or solitary nests, are never seen. A little colony, which established itself in the neighbourhood of Saratoga in 1828, increased so rapidly that in 1830 it consisted of several hundreds of nests. * *

For some time after they appear, the hirundines in general pay no attention to the business of nidification, but play and sport about, either to recruit from the fatigue of their journey, if they do migrate at all, or else that their blood may recover its true tone and texture after it has been so long benumbed by the severities of the winter. About the middle of May, if the weather be fine, the martin begins to think in earnest of providing a mansion for its family. The crust or shell of this nest seems to be formed of such dirt or loam as comes most readily to hand, and is tempered and wrought together with little bits of broken straws to render it tough and tenacious. As this bird always builds against a perpendicular wall without any projecting ledge under, it requires its utmost efforts to get the first foundation firmly fixed, so that it may safely carry the superstructure. On this occasion the bird not only clings with its claws, but partly supports itself by strongly inclining its tail against the wall, making that a fulcrum; and thus steadied, it works and plasters the materials into the face of the brick or stone. But then

that this work may not, while it is soft and green, pull itself down by its own weight, the provident architect has prudence and forbearance enough not to advance her work too fast; but by building only in the morning, and by dedicating the rest of the day to food and amusement, gives it sufficient time to dry and harden. About half-an-inch seems to be a sufficient layer for a day. Thus careful workmen when they build mud walls (informed at first perhaps by this little bird) raise but a moderate layer at a time, and then desist; lest the work should become top-heavy, and so be ruined by its own weight. By this method in about ten or twelve days is formed an hemispheric nest with a small aperture towards the top, strong, compact, and warm; and perfectly fitted for all the purposes for which it was intended. But then nothing is more common than for the house sparrow, as soon as the shell is finished, to seize on it as his own, to eject the owner, and to line it after its own manner.

After so much labour is bestowed in erecting a mansion, as Nature seldom works in vain, martins will breed on for several years together in the same nest, where it happens to be well sheltered, and secure from the injuries of weather. The shell or crust of the nest is a sort of rustic-work full of knobs and protuberances on the outside; nor is the inside of those that I have examined smoothed with any exactness at all; but is rendered soft and warm, and fit for incubation, by a lining of small straws, grasses, and feathers; and sometimes by a bed of moss interwoven with wool. In this nest they tread, or engender, frequently during the time of building; and the hen lays from three to five white eggs.—*White's Selborne.*

MARTINGAL, *s.* A broad strap made fast to the girths under the belly of a horse, which runs between the two legs to fasten the other end under the noseband of the bridle.

The martingal is generally attached to a horse who throws his head up. It is unsafe in the field, and only efficient when used by a light handed and practised rider.

MASH, *s.* Anything mingled or beaten together into an undistinguished or confused body; a mixture for a horse.

Bran mashes are made by pouring boiling water on fresh sweet bran in a pail, so that the mixture, when stirred, may be about the consistency of a soft poultice; it is then to be covered over, and not given to the horse until sufficiently cold. When it is thought necessary to steam the head, as it is termed, the mash is put into the manger while hot. Steaming the head is recommended in strangles, colds, and sore throats.

Bran mashes are proper in fever and all inflammatory complaints. They are useful also as a preparative to physic, serving to remove indurated fæces, and to facilitate the operation of the medicine. Mashes are a necessary diet while physic is operating. In making malt mashes, the water should be below the boiling point, otherwise the malt would be spoiled. Mashes are given for recruiting strength, when a horse is debilitated from fever or any other cause. When a horse has been fed high for some time with oats and beans, a change to bran mashes for two or three days will often do a great deal of good. The bran should be fresh, and perfectly free from any musty smell. There is a finer kind of bran, named gurgings or pollard, which, though more nutritious, is not so fit for medicinal purposes.—*White.*

MASH, *v.* To beat into a confused mass; to mix malt and water together in brewing.

MASTER-SINEW, *s.* A large sinew that surrounds the hough, and divides it from the bone by a hollow place, where windgalls are usually seated.

MASTICATION, *s.* The act of chewing.

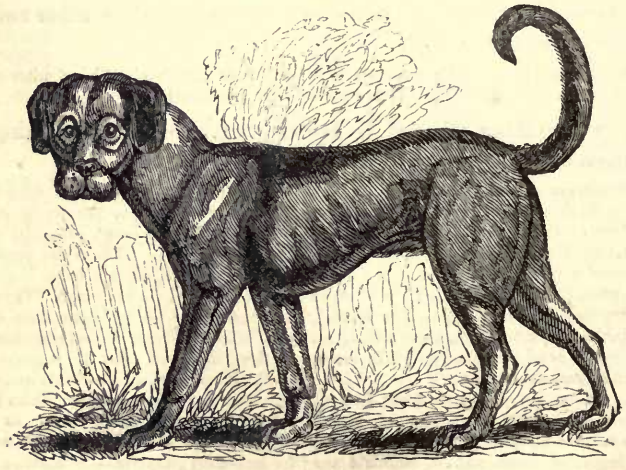
Hay, as often given, is too dry for mastication or digestion. If it has been suffered to stand until the seed becomes ripe, it is very deficient in nutriment, and difficult of digestion; and, however perfectly it may be masticated, will only serve to oppress the stomach without affording any thing that is capable of being formed into good chyle. Hay that has been kept more than one year becomes dry and deficient in nutriment, especially when kept in small mows and exposed to the wind. When such hay therefore is given to horses, it requires to be moistened with water, and given in moderate quantity. From eight to twelve pounds of hay and one peck of oats is a sufficient allowance, both as to proportion and quantity, for any saddle horse of whatever size he may be, provided he has only moderate

work; but when his exertions exceed that degree which may be termed moderate, then an additional allowance is necessary, and that addition should be in oats or beans.

The teeth may be imperfect, and often are so; the grinders wear in a different manner from that in which they would, were the animals in a state of nature: consequently sharp edges are sometimes formed on the outside of the higher grinders, and on the inside of the lower grinders; and the inside of the cheeks and the tongue, with the skin or membrane connected with it, are thereby wounded, which prevents the horse from masticating, without considerable pain, and induces him to swallow his food imperfectly chewed; this is more especially the case with hay; and when hay is swallowed in this state it does harm, being difficult of digestion, as then its nutritive matter is not easily extracted by the gastric power; hence arise indigestion, flatulency, and numerous disorders. Mastication may be impeded or prevented by that state of the mouth which generally attends teething: it may also be affected by an injudicious use of the bit (as is well known in regiments of cavalry where it is too common), and has been attributed to the spiculæ of the squirrel-tail grass. The consequence of this imperfection is worms, in addition to indigestion and all its consequences.—*White.*

MASTIC, *s.* A kind of gum gathered from trees of the same name; a kind of mortar or cement.

MASTIFF (*Canis Anglicus*, LINN.), *s.* A dog of the largest size.



This is a large and powerful animal, much stronger than the bull dog; his ears are longer and more pendulous; his lips are full and loose, the upper one hanging considerably over the lower at the two extremities; his aspect is grave and somewhat sullen; and his bark loud, deep-toned, and terrific, particularly during the night.

The mastiff differs in form from the bulldog in being much longer in the legs, and not so deep in the chest; and while his head is large in proportion to his body, he wants the projecting under jaw of the latter.

Buffon was of opinion that the mastiff is not an original race, but a mongrel generated betwixt the Irish greyhound and the bulldog. This, however, must be mere conjecture; for the mastiff, in his pure and uncontaminated state, has a much more dignified aspect than either of these dogs; and we are rather inclined to believe him to be an original breed peculiar to Britain. We are borne out in this opinion, as we find it on record that so early as the time of the Roman emperors, this country was celebrated on account of its dogs of this kind. At the period Great Britain was under the Roman yoke, an officer was appointed to live here, whose sole business it was to breed, select, and send to Rome such as promised, by their size and strength, to become fit for the combats of the amphitheatre. Dr. Caius, in his Treatise on British Dogs, tells us that three mastiffs were reckoned a match for a bear, and four for a lion.

This dog, from his large size and commanding aspect, is naturally calculated to intimidate strangers, and he is admirably suited for and principally used in protecting large and extensive premises containing property of value, which he watches with most scrupulous care and assiduity. He is so instinctively impressed with the importance of his charge, that he will only quit it with the loss of his life, which he will rather forfeit than betray the confidence reposed in him. With his naturally commanding and imposing appearance, calculated to keep at a distance the ill-intentioned, he is nevertheless possessed of the greatest mildness of manners, and is as solicitous to gain attention and as faithfully grateful for favours bestowed, as the most diminutive of the canine tribe. The mastiff displays one peculiarity which seems inherent,—his ferocity is always increased by the degree of restraint in which he is kept. If constantly on the chain he is much more dangerous to approach than when in a state of liberty; from whence it evidently appears that what may be considered as a friendly kindness on one side, is always productive of confidence on the other.

The mastiff usually shows a remarkable and peculiar warmth in his attachments, and, on the other hand, he is equally distinguished for inveteracy in his dislike. If he is once severely corrected or insulted, it is almost impossible to eradicate the feeling from his memory, and it is no less difficult to obtain a reconciliation with him. He seems conscious of his own strength, power, and authority, and will seldom condescend to lower his dignity by servile fawning, while he appears to consider his services as only befitting a trust of the highest importance. This dog is naturally possessed of strong instinctive sensibility, speedily obtains a knowledge of all the duties required of him, and discharges them too with the most punctual assiduity. In the protection of gardens, houses, woodyards, and widely extended manufactories, his vigilance is very striking; he makes regular rounds of the whole premises like a watchman, examines every part of them with a careful eye; his penetration reaches even the remotest corner, and not a spot is passed by until he is satisfied that all is in a state of perfect security. During the night he gives a signal of his presence by repeated and vociferous barkings, which are increased upon the least cause of alarm; and, contrary to the spirit of the bull-dog, whose invariable practice is to bite before he barks, the mastiff always warns before he attacks. This breed is very difficult to be obtained in purity, from the various admixtures and experimental crosses which have taken place. The genuine old English mastiff is now rarely to be seen, although we have dogs of various sizes and colours which go under that name.

This animal, conscious of his superior strength, has been known to chastise, with great propriety, the impertinence of an inferior:—a large dog of this kind, belonging to the late M. Ridley, Esq., of Heaton, near Newcastle, being frequently molested by a mongrel, and teased by its continual barking, at last took it up in his mouth by the back, and with great composure dropped it over the quay into the river, without doing any further injury to an enemy so much beneath his notice.—*Sporting Anecdotes.*

MASTLIN, *s.* Mixed corn, as wheat and rye.

MAT, *s.* A texture of sedge, flags, or rushes.

MAT, *v.* To cover with mats; to twist together, to join like a mat.

MATADORE, *s.* A term used in the games of quadrille and ombre. The matadores are the two black aces when joined with the two black deuces, or red sevens in trumps.

MATCH, *s.* Anything that catches fire; a contest, a game; one equal to another. *Vide* RACING.

MATCH, *v.* To be equal to; to equal; to suit, to proportion; to marry.

MATE, *s.* A husband or wife; a companion, male or female; the male or female of animals; one that sails in the same ship; one that eats at the same table; a kind of toothed instrument to pull up wood; a pickaxe.

MAW, *s.* The stomach of animals; the craw of birds.

MAW-WORM, *s.* Gut-worms frequently creep into the stomach, whence they are called stomach or maw-worms.

MAY-FLY, *s.* An insect; a very killing artificial fly.

Mead, *s.* A kind of drink made of water and honey.

Meadow, *s.* Rich pasture ground from which hay is made.

Meal, *s.* The act of eating at a certain time; a repast; the flour or edible part of corn.

Mealy, *a.* Having the taste or soft insipidity of meal; besprinkled as with meal.

Mease, *s.* A mease of herrings is five hundred.

Measles, *s.* A kind of eruptive and infectious fever; a disease of swine.

Measly, *a.* Scabbed with the measles.

Meathe, *s.* A kind of drink.

Medicate, *v.* To tincture or impregnate with anything medicinal.

Medicinal, *a.* Having the power of healing, having physical virtue; belonging to physic.

Medicine, *s.* Any remedy administered by a physician.

Medullar or Medullary, *a.* Pertaining to the marrow.

Meer, *s.* A lake, a boundary.

Meershaum, *s.* A fine sort of Turkish clay, of which pipes are made in Germany of various forms. It assumes a beautiful brown colour after it has been used for smoking some time.—*Crabbe.*

Meloe, *s.* Insects, of which the two principal species are the oil beetle, so called because, on being handled, it exudes from its legs drops of a clear deep-yellow oil or fluid, of a very peculiar or penetrating smell; and the meloë vesicatorius, or Spanish fly, which is used for blistering.—*Ibid.*

Melwel, *s.* A kind of fish.

Membrane, *s.* A membrane is a web of several sorts of fibres interwoven together for the covering and wrapping up of some parts.

Membranous, *a.* Consisting of fibres.

Menage, *s.* A collection of animals. Menagerie, *s.* A place for keeping foreign birds, and other curious animals.

Menstruum, *s.* All liquors are called menstruums which are used as dissolvents, or to extract the virtues of ingredients by infusion or decoction.

Mercurial, *a.* Under the influence of Mercury; active, sprightly; consisting of quicksilver.

Mercurial ointment is made by rubbing together in a mortar quicksilver and hogs' lard, in various proportions, according to the strength required, until the former disappears, and the mixture assumes a dark blue or lead colour.

In the strongest mercurial ointment there are equal parts of quicksilver and lard; these are the best proportions in which it can be made, as it is easily weakened by the addition of lard.

Mercurial ointment is employed in veterinary practice as an application to callous swellings or enlarged joints. It is mixed with camphor in those cases, and is certainly much more efficacious when converted into a blister by the addition of cantharides or euphorbium. In this state it is a good remedy for bog spavin or other swellings of the hock joint.

Mercurial ointment is said to be an effectual remedy for the scab in sheep, and is often an ingredient in ointments for the mange.—*White.*

Mercury, *s.* A mineral or metallic fluid vulgarly called quicksilver, and

distinguished from all other metals by its extreme fusibility, which is such that it does not assume the solid state until cooled to the thirtieth degree below 0 on Fahrenheit's thermometer; and of course is always fluid in temperate climates. It is volatile, and rises in small portions at the common temperature of the air. It readily combines with gold, silver, lead, tin, bismuth, and zinc, and on that account is usefully employed in silvering looking-glasses, making barometers and thermometers, and for various other purposes.—*Crabbe.*

MERE, *s.* A pool, commonly a large pool or lake; a boundary.

MERGANSER, *s.* (*Mergus serrator*, LINN.)

This species is about twenty-one inches in length; weight two pounds. The bill is three inches long; the upper mandible dusky, the lower red; irides purplish red. The head and part of the neck black, glossed with green; on the back of the head the feathers are long, forming a sort of pendant crest; the rest of the neck and under part of the body white; breast ferruginous, mixed with black and white; upper part of the back glossy black; rump marked with brown and cinereous transverse streaks; the scapulars and wing coverts are some black and some white; quills dusky; tail brown; legs orange; claws black.

Mr. Pennant says this species breeds in the Isle of Ely, on the shores amongst the loose stones. They sometimes appear in the south of England in winter, but more frequently in the north, and are said to breed in Scotland in some of the lochs. They are found in the Russian dominions, about the great rivers of Siberia.

They are also said to breed on the shores of Greenland, and are observed at Hudson's Bay in large flocks, breeding there as well as at Newfoundland, chiefly on the islands. The nest, which is built on the margin of lakes and rivers, is said to be made with dry grass, lined with down; the eggs are generally eight in number, of a bluish white; sometimes as many as thirteen in a nest, about the size of those of a duck. The young may be distinguished from the adult, by the black band on the wing spot. —*Montagu.*

MERGUS, *s.* A genus in ornithology.

Birds of this genus have roundish slender bills, furnished at the end with a hard, horny, crooked nail; edges of the mandibles very sharply toothed, or serrated; the nostrils small, subovated, and placed near the middle of the bill: tongue rough, with hard indented papillæ turned backward; legs short; feet webbed; toes long, and the outer ones about the same length as the middle; the head is small, but the quantity of soft silky feathers with which it is furnished, and which they can bristle up from the nape of the neck to the brow, give it a large appearance. They are a broad, long-bodied, and flat-backed kind of birds, and swim very squatly on the water, the body seeming nearly submerged, with only the head and neck clearly seen. They are excellent divers, remaining a long while under water, and getting to a great distance before they appear again. They fly near the surface of the water, and, notwithstanding the shortness of their wings, with great swiftness, though seldom to any great distance. They devour a large quantity of fish; and their pointed sharp-toothed, and hooked bills, are well calculated for holding fast their slippery prey, none of which, when once within their gripe, can escape. Latham enumerated six species and three varieties of this genus, five of which are accounted British birds. George Strickland, Esq., of Ropin, enumerates six species of this genus, which are all met with in Great Britain and its adjacent isles: the author agrees with him likewise in opinion, that much remains to be done in order to clear up the doubts in which their history is involved, and by which the classification of different species is confused: he says, "The genus mergus, though only a very small tribe of birds, still remain in the greatest obscurity, and I have not yet met with any ornithologist, who has not, in my opinion, multiplied the number of the species, by considering birds of this genus as of different kinds, when they differ only in sex." His arrangement is as follows:—

GENUS MERGUS.

Species	1	Merganser — Goosander
	2	Castor — Dun Diver
	3	Serrator — Less Dun Diver
	4	Albellus — Smew
	5	——— — Lough Diver
	6	Minutus — Red-headed Smew.

For a particular description of each species, *vide Bewick, Montagu, &c. &c.*

MERLIN, *s.* A kind of hawk.

The Merlin—(*Falco Æsalon*, LINN.; *L'Emerillon*, BUFF.)—The smallest of all the hawk kind, scarcely exceeding the size of a black bird. Its bill is blue; cere and irides yellow; the head is of a rust colour, streaked with black; back and wings of a deepish brown, tinged with ash, streaked down the shafts with black, and edged with rust colour: quill feathers dark tipped and margined on the inner webs with reddish white: the breast and belly are of a yellowish white, with streaks of rusty brown pointing downwards; the tail is long, and marked with alternate dusky and pale bars; the wings, when closed, do not reach quite to the end of the tail; the legs are yellow; claws black.

The merlin, though small, is not inferior in courage to any of the falcon tribe. It was used for taking larks, partridges, and quails, which it would frequently kill by one blow, striking them on the breast, head, or neck. Buffon observes, that this bird differs from the falcons, and all the rapacious kind, in the male and female being of the same size. The merlin does not breed here, but visits us in October; it flies low, and with great celerity and ease. It preys on small birds, and breeds in woods, laying five or six eggs.

MERRYTHOUGHT, *s.* A forked bone in the body of fowls.

MESENTERY, *s.* That round which the guts are convolved.

MESH, *s.* The space between the threads of a net. MESH, *v.* To catch in a net; to insnare.

METAL, *s.* A hard compact body, malleable and capable of fusion. The metals are six in number; first, gold; second, silver; third, copper; fourth, tin; fifth, iron; and sixth, lead.

METALLIC, *a.* Partaking of metal, containing metal, consisting of metal.

METALLINE, *a.* Impregnated with metal; consisting of metal.

METTLE, *s.* Spirit, sprightliness, courage. METTLESOME, *a.* Sprightly, lively, brisk.

MEW, *s.* A cage, an enclosure, a place where a thing is confined; cry of a cat; a sea fowl; the place where a hawk changes her feathers.

The mew is the place where hawks are put to moult. They are sometimes kept loose in a room; but it is, in my opinion, much better to mew them on perches or on blocks.

Hawks must be fed very high, and kept very quiet when they mew; they are also kept unhooded, and frequently bathed.—*Sebright.*

Midriff, *s.* The diaphragm.

Midge, *s.* A small fly, a gnat. The artificial midge is very serviceable in evening fishing.

Midstream, *s.* Middle of the stream.

Migration, *s.* Act of changing place.

What has so often been said of herrings, mackerel, and other gregarious fish moving in vast shoals from Shetland to the Orkneys, and of their then dividing and surrounding the Islands of Great Britain and Ireland, is, I think, liable to some objections.

During the last month (April) large shoals of mackerel came on the shallows, a few miles from Brighton, one day, and disappeared the next. This is constantly observed to be the case, not only there but in other places, and may perhaps be accounted for in this way. We must consider that there are probably as many mountains, and valleys, and plains in the sea as we know there are on land. We are to recollect that those mountains and valleys are covered with weeds of various kinds, which afford food and shelter to an infinite number of fish and marine animals and insects; and we know that all fish come into shallow water for the purpose of depositing their ova, which the influence of the air, not, as has been commonly supposed, of the sun, is required for bringing to maturity. Is it not probable, then, that the shoals of fish which are found on our fishing banks, have left some neighbouring deep, where they had retired for the winter, till they are rendered buoyant by the quantity of roe within them, and are directed by instinct to go and deposit it in the adjacent shallows? If, as is generally supposed, all fish, both great and small, from the whale to the herring, have each their respective haunts and localities, why should we suppose that they quit those haunts to go many hundred miles in search of spawning ground, when that ground is to be found near their winter retreats? It appears more probable that the large shoals of fish which are found are quite unconnected with each other, and that they have all just quitted some neighbouring deep for the nearest shallow, only moving on as the ground is occupied, or till they have paired and the roe is ready to be deposited.—*Jesse.*

Mile, *s.* The usual measure of roads in England, one thousand seven hundred and sixty yards; eight furlongs, or five thousand two hundred and eighty feet.

Milk, *s.* The liquor with which animals feed their young; emulsion made by contusion of seeds.

To dry up a Bitch's Milk.—Take goose grease and rum, equal portions, rub the teats once or twice a day; if the case is bad, for three or four days.

Brandy and salad oil, used in the same way, will have a similar effect.

Milktooth, *s.* Milkteeth are those small teeth which come forth before when a foal is about three months old.

Milkwhite, *a.* White as milk.

Milldam, *s.* The mound by which the water is kept up to raise it for the mill.

Millepedes, *s.* Wood-lice, so called from their numerous feet.

Miller's-thumb, *s.* A small fish found in brooks, called likewise a bull's head.

Millet, *s.* A plant; a kind of fish.

Mineral, *s.* Fossil body, matter dug out of mines.

Minnow, *s.* A very small fish, a pink.

This beautiful little fish abounds in many of our small gravelly streams, where they keep in shoals; it is sometimes called the pink, and when in right season and not sick, which only happens just after spawning, is dappled, its sides inclining to a greenish watery sky colour, its belly white, and its back almost black, but these colours are not universal; the body is

slender and smooth, the scales being extremely small; it seldom exceeds three inches in length; the lateral line is of a golden colour, the back flat and of a deep olive; the sides and belly vary greatly in different fish, as a few are of a rich crimson, others are bluish, and others white. The tail is forked, and marked near the base with a dusky spot. The minnow appers first in March, continues until Michaelmas, and then betakes himself to the mud, weed-roots, or wood in rivers, to secure himself from floods and fishes of prey. They are usually full of spawn all the summer (for they breed often), and quickly arrive at their growth and perfection.

Although so diminutive in size, the minnow may be compared for the excellency of its taste to many of the most famed fish; they are in some places made into minnow tansies; after being gutted and well washed in salt and water, their heads and tails cut off, they are then to be put with yolks of eggs well beat with cowslips and primrose flowers, and a little tansy shred very small, and fried in good butter; the sauce to them is butter, vinegar, or verjuice, and sugar. To the young sportsman, who has not possessed himself of the patience requisite to form the angler, the minnow yields plenty of amusement. They will in hot weather bite eagerly all day, and are frequently drawn out of the water from their adhering to the end of the worm, without being touched by the hook; the best way to catch them, is, to have three or four very small hooks, baited with the least red worm, or a piece of one, and a crow quill float; fish deeper than midwater, or near the ground in shallow places, in eddies, and at the sides of small streams.

Minnows are very excellent baits for many fish, as will hereafter be specified, and when wanted in haste for that purpose, a small meshed casting-net will save much time and trouble, as enough for a day's diversion may be caught at a throw or two in shallow streams.

* * *

Minnow Fishing.—The tackle for minnow fishing for trouts, should be of the same sort as that for salmon, with this difference, that it must be finer, with a stout single silk worm gut at bottom, and the hook No. 2, 3, or 4, according to the bigness of the trout in the water where angled for: the middle-sized and whitest minnows are the best (of which those caught in streams are far brighter than those procured from ditches or stagnated waters), and the way of baiting recommended by Walton, is,

"To put the hook in at the mouth and draw it out through the gill about three inches; then again put the hook in at the mouth, and let the point and beard come out at the tail; then tie the hook and the tail about with a fine white thread, which will make it spin quicker; pull back that part of the line which was slack when the hook was thrust in the second time, which will fasten the head of the minnow, so as to make it be almost straight on the hook; try if it turns well, which it cannot do too fast. Angle with the point of the rod down the stream, drawing the minnow against the current gradually, and near the surface: when descried, the trout will freely come at it; be careful not to snatch it away, nor strike until he has turned with the bait. For this angling the winch and ringed rod is to be always used; and there should be two or three swivels on the line, which will assist the spinning of the minnow."

Walton's method may be altered and improved, by first thrusting the hook in at the lower side of the minnow's under, and also quite through the upper chap, drawing it two or three inches on the line, and putting the hook in at the mouth as before directed; this will keep the minnow's mouth closed, which otherwise should be stitched up.

Various hooks are recommended in minnow fishing; one much used consists of a large hook, with two very small ones fastened back to back to a piece of gut about two inches long, with a small hook to another gut something shorter, to fasten the head of the minnow: these pieces of gut are so attached to the link, that the two small hooks may be about the middle of the minnow when baited, and the other reach the head; a small lead cap (which renders other weight unnecessary) slides upon the link, keeps the short pieces of gut close, and falls upon the head of the minnow. The advocates for this plan boast of the certainty of hooking the trout with the two small hooks; this may be true, says an angler of no inconsiderable skill, but he asks if these small hooks (which seldom exceed No. 12) are sufficient to kill a trout of any bigness; and when a fish is hooked by these, the other hooks are entirely useless, from the situation in which they are placed. Another objection started by the same gentleman, is, that when the gut to which they are tied has been a short time in the water, it will not sustain the weight of the hooks, but they will sink below the minnow, and are continually foul of weeds and rubbish at the bottom; besides, the lead cap, falling upon the minnow's head, totally conceals the eyes, parts which add life and attraction to the bait, and are, on that account, so essential so be seen.

Some use about three feet of stout silk-worm gut for the bottom links, with two or three small swivels, which prevents the line from being entangled, and assists the twirling of the minnow. If these hooks are used as directed for pike, it will be successful; the bottom swivel must be open at one end, that the link on which the hooks are may be taken

off occasionally to be baited; the proper size of these hooks is No. 7; if the old method of a large hook and a smaller above it, be preferred, the proper sizes are Nos. 2 and 6, with a running line; the angler can permit the minnow to be carried by the current under bushes, banks, &c.; this will be effected by his suffering the stream to gain upon it when he pulls it back, which also prevents its sinking to the bottom, and entangling the hooks; as he draws it gently against the stream, favouring the direction to which he would have the bait driven, it will of course spin round very quick, and this is the moment the trout usually takes it; by holding the rod firm, he will infallibly hook himself; will then spring out of the water several times, and, by an astonishing strength and agility, endeavour to get quit of the hook. The angler must not be too hasty, but lower his right hand, which will raise the top of his rod and keep it bent; by this means the trout may be tired, but he will not readily suffer himself to be got into the landing-net; the best way therefore, instead of bringing the fish to the surface (where he will so violently plunge, as to endanger breaking the rod, line, or hook), is to keep him as deep in the water as possible.

Artificial minnows made of mother of pearl, &c., fitted to single, two, or more hooks, and bent in various attitudes, are to be purchased at all the tackle makers.—*Daniel.*

MINT, *s.* A valuable herb that grows very abundantly. There are two kinds used in horse medicine, spearmint and peppermint. The former is an excellent carminative, generally affording relief in flatulency of the stomach and bowels, and the complaints which arise from it, termed gripes and flatulent colic.

MINUTE, *s.* The sixtieth part of an hour; any small space of time.

MINUTE-GLASS, *s.* A glass of which the sand measures a minute.

MINUTE-WATCH, *s.* A watch in which minutes are more distinctly marked than in common watches which reckon by the hour. Such are generally used by judges of a course, &c.

MISS, *v.* Not to hit; to mistake.

MISSEL THRUSH (*Turdus viscivorus*, LINN.; *La Draine*, BUFF.) *s.* A bird.

The length of this bird is about eleven inches. The bill is dusky, the base of the lower bill yellow; the eyes hazel; the head, back, and lesser coverts of the wings, are of a deep olive brown, the latter tipped with white; the lower part of the back and rump tinged with yellow; the cheeks are of a yellowish white, spotted with brown, as are also the breast and belly, which are marked with larger spots of a dark brown colour; the quills are brown, with pale edges; tail feathers the same, the three outermost tipped with white: the legs are yellow, claws black. The female builds her nest in bushes or low trees, and lays four or five eggs, of a greenish blue colour, marked with red spots. Its nest is made of moss, leaves, &c., lined with dry grass, strengthened on the outside with small twigs. It begins to sing very early, often on the turn of the year in blowing showery weather, whence in some places it is called the storm-cock. Its note of anger is very loud and harsh, between a chatter and a shriek, which accounts for some of its names. It feeds on various kinds of berries, particularly those of the misletoe, of which birdlime is made. It was formerly believed that the plant of that name was only propagated by the seed which passed the digestive organs of this bird, whence arose the proverb—"*Turdus malum sibi cacat;*" it likewise feeds on caterpillars and various kinds of insects, with which it also feeds its young.

This bird is found in various parts of Europe, and is said to be migratory in some places, but continues in England the whole year, and frequently has two broods.—*Bewick.*

MISSILE, *a.* Thrown by the hand, striking at a distance.

MIST, *s.* A low thin cloud, a small thin rain, the drops of which are hardly perceptible.

MISLETOE, *s.* The name of one of those plants which draw their nourish-

ment from some other plant. It generally grows on the apple tree, sometimes on the oak, and was held in great veneration by the ancient Druids.

Mite, *s.* A small insect found in cheese or corn; a weevil; vermin found about the head and nares of hawks.

Mithridate, *s.* Mithridate was formerly, before medicine was simplified, one of the capital medicines of the shops, consisting of a great number of ingredients, and has its name from its inventor, Mithridates, king of Pontus.

The following is the recipe for Mithridate, or Confection of Democrites.

Cinnamon twenty-four drachms; Indian spikenard, ginger, saffron, shepherd's-purse seed, frankincense, Chian turpentine, of each ten drachms; Zedoary mace, long pepper, juice of hypocistus, storax, opoponax, galbanum, opobalsam and castor, of each one ounce; scordium, cubebs, white pepper, carrot seed, bdellium, of each seven drachms; celtic nard, gentian, dittany of Crete, red roses, wild parsley seed, cardamoms, sweet fennel seeds, gum arabic, strained opium, dissolved in wine, of each five drachms; aromatic reed, valerian root, sagapenum, aniseed, of each three drachms; catechu, St. John's wort, skinks, of each two ounces and a half, &c. &c.

Another of these absurd preparations is composed of *seventy-two* articles.

Mittens, *s.* Coarse gloves for the winter; gloves that cover the arm without covering the fingers.

Mob, *v.* To harass or overbear by tumult; a term in hunting.

Mohair, *s.* Thread or stuff made of camel's or other hair; an excellent article for sporting dresses.

Mole, *s.* A mole is a formless concretion of extravasated blood, which grows into a kind of flesh in the uterus; a natural spot or discolouration of the body; a mound, a dyke; a little beast that works whilst under ground.

Molecatcher, *s.* One whose employment is to catch moles.

Molehill, *s.* Hillock thrown up by the mole working underground.

Mollusca, *s.* An order of the class Vermes of Linnæus. It comprehends naked simple animals not included in a shell, but furnished with limbs, as snails, star fish, sea urchins, cuttle fish, &c.

Moon-eyed, *a.* Having eyes affected by the revolutions of the moon; dim-eyed, purblind.

Moonfish, *s.* Moonfish is so called, because the tail fin is shaped like a half moon.

Moor, *s.* A marsh, a fen, a bog, a tract of low and watery ground; a negro.

Moorcock, *s.* The male of the moorhen.

Moorhen, *s.* A fowl that feeds in the fens, without web feet.

Moose, *s.* A large American deer. They were formerly found in Ireland, and their gigantic remains are frequently discovered in the bogs and morasses.

Mop, *s.* Pieces of cloth, or locks of wool, fixed to a long handle, to clean floors, carriages, &c. &c.

Morass, *s.* Fen, bog, moor.

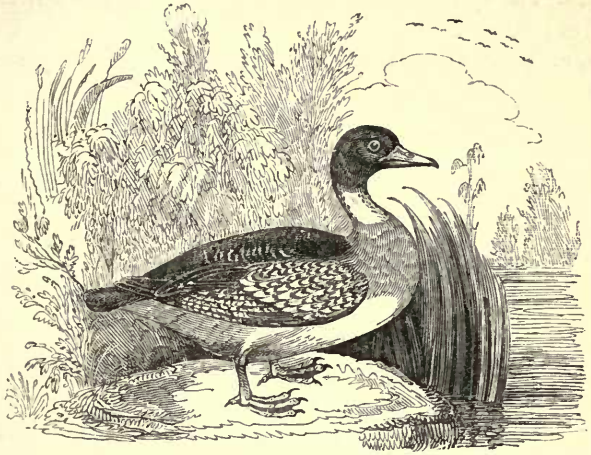
Morbid, *a.* Diseased, in a state contrary to health.

Morbidness, *s.* State of being diseased.

Mordant, *a.* Biting, pungent, acrid.

Moreland, *s.* A mountainous or hilly country.

Morillon, (*Anas Glaucion*, Linn.; *Le Morillon*, Buff.) *s.* An aquatic bird.



Bill brown, orange from the nostrils to the point, the knob of which is black; it is an inch and a half long, rather narrow towards the apex; the nostrils are placed very forward; head brown, cheeks tinged with black; irides straw colour; a broad white circle round the neck, the back part of which is mottled with brown; breast, sides of the body, and scapular feathers, white, barred with black; belly white; thighs and vent feathers brown and white; inner coverts of the wings brown; back and coverts of the wings black, mottled with white; quill feathers and tertials black; secondaries white; tail rounded and grey; legs and toes yellow brown, with a greenish tinge; webs and claws black. Length, one foot four inches; breadth, two feet four inches; weight, one pound seven ounces.

They are generally seen in small flocks, diving for their food, near the shore.—*Bewick.*

Mortar, *s.* A strong vessel in which materials are broken by being pounded with a pestle; a short wide cannon, out of which bombs are thrown; cement made of lime and sand with water, and used to join stones or bricks.

Mortification, *s.* The state of corrupting or losing the vital qualities, gangrene; humiliation, vexation, trouble; to humble, to depress, to vex.

Mortise, *s.* A hole cut into wood that another piece may be put into it.

Moss, *s.* A plant.

Moth, *s.* A small winged insect that eats cloths and hangings; an evening fishing fly.

MOULT, *v.* To shed or change the feathers, to lose the feathers.

MOUNTAIN, *s.* A large hill, a vast protuberance of the earth. MOUNTAIN, *a.* Found on the mountains, as mountain hares, mountain partridges.

MOUNTAINOUS, *a.* Hilly, full of mountains; large as mountains, huge; inhabiting mountains.

MOUSE, *s.* The smallest of all beasts, a little animal haunting houses and corn-fields. *Vide* FIELD MOUSE.

MOUTH, *s.* The aperture in the head of any animal at which the food is received; the opening, the entrance; the instrument of speaking.

MOUTH, *v.* To chew, to eat; to seize in the mouth; to injure with the teeth.

MOW, *s.* A loft or chamber where any hay or corn is laid up.

MOW, *v.* To cut with a scythe; to put in a mow.

MUCILAGE, *s.* A slimy or viscous body, a body with moisture sufficient to hold it together.

Mucilage is made by dissolving gum arabic in water. There are other cheaper gums, however, that will answer the same purpose: mucilage may be made also from quince seeds and starch. For internal use it is most cheaply and abundantly obtained from flax-seed, or linseed. Eight ounces infused in two or three quarts of boiling water, forms a good mucilage.—*White.*

MUCILAGINOUS, *a.* Slimy, viscous, soft with some degree of tenacity.

MUCOUS, *a.* Slimy, viscous.

MUCUS, *s.* The viscous substance discharged at the nose; any viscous matter.

MUD, *s.* The slime at the bottom of still water; earth well moistened with water.

MUE, *v.* To moult, to change feathers.

MUFFLE, *v.* To cover from the weather; to blindfold; to conceal; to involve, to hood a hawk.

MULE, *s.* An animal generally between a he-ass and a mare, or between a horse and a she-ass.

These useful and hardy animals are the offspring of the horse and ass, or ass and mare; those produced between the two last are esteemed the best, as the mule is observed to partake less of the male than of the female parent; yet it is a general remark, that they almost always inherit, in some degree, the obstinacy of the parent ass, though it must be confessed that this vice is heightened by their being injudiciously broke in.

Savoy produces very large mules, but the finest are bred in Spain. They are chiefly used in countries where there are rocky and stony roads, as about the Alps and Pyrenees, &c. Great numbers of them are kept in these places, they are usually black, and are strong, well-made, and large, being mostly bred out of fine Spanish mares. They are sometimes fifteen or sixteen hands high, and a good one of this kind is worth fifty or sixty pounds. No creature is so proper for carrying large burdens, or more surefooted. They are much stronger for draught than our horses; often as thick-set as our dray-horses, and will travel for several months together with six or eight hundred weight on their backs.

The mule far excels the horse for travelling in a mountainous country, the former being able to tread securely where the latter can hardly stand. Their manner of going down the precipices of the Alps, the Andes, &c., is very extraordinary. In these passages, on one side are steep eminences, and on the other frightful abysses, and as they generally follow the direction of the mountain, the road, instead of lying on a level, forms at every little

distance, deep declivities of several hundred yards downward. These can be descended only by mules, and these animals seem sensible of the danger, and the caution that is to be used in such descents. When they come to the edge of one of these precipices, they stop, without being checked by the rider, and if he inadvertently attempts to spur them on, they continue immovable, apparently ruminating on the danger that lies before them, and preparing themselves for the encounter. They not only attentively view the road, but tremble and snort at the danger. Having prepared for the descent, they place their fore-feet in a posture as if they were stopping themselves, they then put their hind-feet together, but a little forward, as if they were going to lie down. In this attitude, having taken, as it were, a survey of the road, they slide down with the swiftness of a meteor. In the mean time, all that the rider has to do, is to keep himself fast on the saddle without checking the rein, for the least motion is sufficient to disorder the equilibrium of the mule, in which case they both unavoidably perish. But their address in this rapid descent is truly wonderful, for in their swiftest motion, when they seem to have lost all government of themselves, they follow exactly the different windings of the road, as if they had previously settled in their mind the route they were to follow, and had taken every precaution for their safety.

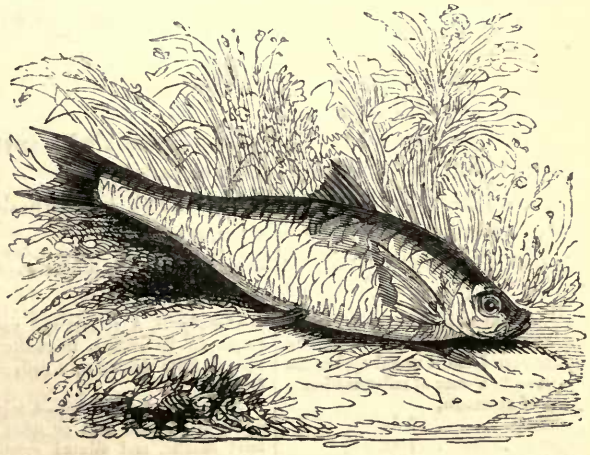
In these journeys the natives place themselves along the sides of the mountains, and holding by the roots of the trees, animate the beasts with shouts, and encourage them to persevere. Some mules, after being long used to such travelling, acquire a kind of reputation for their safety and skill, and their value rises in proportion to their fame.

The Roman ladies had equipages drawn by mules, as appears from the medals of Julia and Agrippina, and at this day, in Spain, the carriages of the nobility, and even of princes, are usually drawn by them. We are assured that M. de Thou, first president of the parliament, had the fourth coach in France, in 1505, till which time every body rode to court and parliament on mules.

* * *

The progeny between the pheasant and the common fowl, are necessarily mules, as proceeding from different species, although of the same genus. They may be obtained with some little difficulty, which they scarcely repay, as being neither an improvement in form nor goodness of the flesh. It is recommended, as the best method, to confine a cock-pheasant half grown with two pullets of the same age, either game, bantam, or common, as may be desired; or to make a house for common hens in a pheasant preserve near home, where they will soon associate with the pheasants, and be trodden by the cocks. Hybrids, or mules, between the pheasant and black grouse, have been occasionally found on the moors.—*Le Keux—Moubray.*

Mullet, *s.* A sea fish.



The mullet is found in great plenty on several of our sandy coasts, and, in particular, haunts those small bays that have influxes of fresh water; they are very cunning, and when

surrounded with a net, the whole shoal frequently escapes by leaping over it; for when one takes the lead, the others are sure to follow.

They come in great shoals into the rivers with the tide during the summer, and keep rooting, like hogs, in the sand or mud, leaving their traces in the form of large round holes; but return back when the water ebbs, never stopping in the rivers. They are something like the dace in shape, yet much thicker; the head is almost square and flat on the top; the nose blunt; lips thick; they have no teeth, only the upper-lip is a little rough, as is also the tongue; between the eyes and mouth is a hard callus; the pupil of the eye is black, encircled with a small silvery line; the colour of the back is dusky, varied with blue and green; the sides silvery, marked with broad, dusky, parallel lines, reaching from head to tail, which is much forked; the scales are large and deciduous, and are also upon the covers of the gills and head, and extend as far as the nostrils. The largest are nearly half a yard long, and the flesh is excellent.

Although the mullet are generally first seen here in the month of June, from the wetness of this summer the shoals are later in their appearance than usual. Mullet are taken in draught-nets like salmon, but on this coast a different mode of fishing is pursued. The shoals in hot weather run in with the tide, and after remaining on the shores and estuaries during flood they return with the ebbing water. The following method we employed in our fishing to-day: being provided with a sufficient quantity of herring-nets and a number of spars and poles, we selected, at low water, a sandy creek for our operations, and commenced erecting a line of poles across the entrance of the cove. The nets were then extended along these uprights, and also secured firmly to the bottom of the spars; the lower part of the net is kept upon the bottom by a row of stones, and the remainder laid flat upon the sands. With the flowing tide the fish pass over the prostrate net, and run along the estuary; at high water the buoy-ropes are raised and secured to the upright poles; with the assistance of a boat the whole is effected in a few minutes, and a network barrier effectually cuts off the retreat of all within. When the ebb of tide commences, the mullet begin to retire, and when they discover that their egress is obstructed, their attempts to effect a passage are both constant and curious—now running down the nets, trying for a broken mesh by which to force an aperture—now with a bold spring endeavouring to clear the buoy-ropes, and, even after repeated failures, leaping at it again and again. The last effort is directed to the bottom, but there the heavy stones resist every attempt to dislodge them, and deserted by the treacherous water, the mullet are left upon the bare sands. * *

The general length of the common mullet (*mugil*) is from twelve to eighteen inches. When used immediately after being taken, the fish is excellent; carriage, even for a short distance, injures it. Dr. Blotch recommends oil and lemon-juice to be used with it at table. Vinegar, with parsley and melted butter, is better—"probatum est." * *

This fish is sometimes preserved by salting; and from its spawn an inferior kind of caviar, called *botargo*, is prepared, by using the common process of curing and drying.—*Wild Sports.*

MULTIPAROUS, *a.* Bringing many at a birth.

MUM, *s.* Ale brewed with wheat.

MUNGREL, *s.* Anything generated between different kinds; anything partaking of the qualities of different causes or parents.

MUNGREL, *a.* Generated between different natures, baseborn, degenerate.

MUNITION, *s.* Ammunition; materials for war.

MURIATES, *s.* Combinations of muriatic acid, with alkalies, earths, or metals.

Muriate of Ammonia, commonly named *crude sal ammoniac.*—When dissolved in vinegar, it has been found a useful application for splents when in a state of inflammation.

Muriate of ammonia, powdered	2 dr.
Vinegar	1 oz.
Alcohol	1 oz.
Water	2 oz.—Mix.

Muriate of Antimony, or *Butter of Antimony.*—A strong and useful caustic, employed by smiths, in canker, punctured wounds from picking up a nail, bruises of the foot, &c.

Muriate of Copper.—A solution of verdigris in muriatic acid or spirit of salt. A mild caustic, and diluted occasionally with water.

Muriate of Soda.—Common salt, or the salt employed with food. This is an excel-

lent laxative for cattle, and, in small doses, promotes digestion. Mow-burnt hay, or bad hay of any kind, is made more palatable to horses and cattle by being moistened with water in which a small quantity of salt has been dissolved, and it is, perhaps, rendered more easy of digestion also.—*White.*

MURKY, *a.* Dark, cloudy, wanting light.

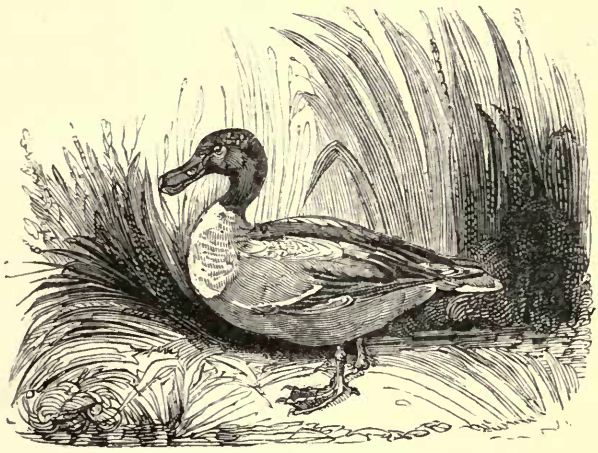
MURREY, *a.* Darkly red.

MUS, *s.* A tribe of order Glires, and class Mammalia. In it are included the common rat and mouse, Norway rat, musk rat, &c. &c.

MUSCADINE, *s.* A kind of sweet grape, sweet wine.

MUSCLE, *s.* A bivalve shell-fish.

MUSCOVY, CAIRO, GUINEA, or INDIAN DUCK (*Anas moschatus*, LINN.; *Le Canard Musque*, BUFF.) *s.*



This species is much larger than the common duck, measuring about two feet in length. The bill is two inches long; the tip and nostrils brown; the other parts of it red, as is also the red warty skin which joins its base, and surrounds the eyes. The crown of the head is rather tufted or crested, and black; the cheeks, throat, and fore part of the neck, white, irregularly marked with black; the belly, from the breast to the thighs, white. The general colour of the rest of the plumage is deep brown, darkest, and glossed with green on the back, rump, quills, and tail; the two outside feathers of the latter, and the first three of the former, are white: the legs and feet are red, short, and thick. This is the general appearance of the musk duck; but, as it is domesticated in almost every country, it varies very much, like all other birds in that state. In the female, the bare warty or carunculated skin which is spread from the bill over the eyes, is of a much duller red, and does not cover so large a portion of the head as it does in the male: she is also of a less size.

These birds have obtained the name of Musk Duck, from their musky smell, which arises from the liquor secreted in the glands on the rump. They are a thriving and prolific species, and their flesh, which is highly flavoured, is by many very much esteemed. They will associate with the common ducks; and instances are not wanting of their producing a mixed breed.—*Bewick.*

MUSCULAR, *a.* Performed by muscles.

Musk, *s.* A very powerful perfume; it is procured from a kind of Indian goat.

Musket, *s.* A soldier's gun; a male hawk of a small kind.

Musketeer, *s.* A soldier whose weapon is his musket.

Musketoon, *s. obs.* A blunderbuss, a short gun of a large bore.

Muslin, *s.* A fine stuff made of cotton.

Mustard, *s.* A plant.

Musty, *a.* Mouldy, spoiled with damp, moist and fetid; stale.

Mute, *a.* Silent, not vocal, not having the use of voice.

Mute, *s.* The excrement of hawks.

Mute, *v.* To dung as birds.

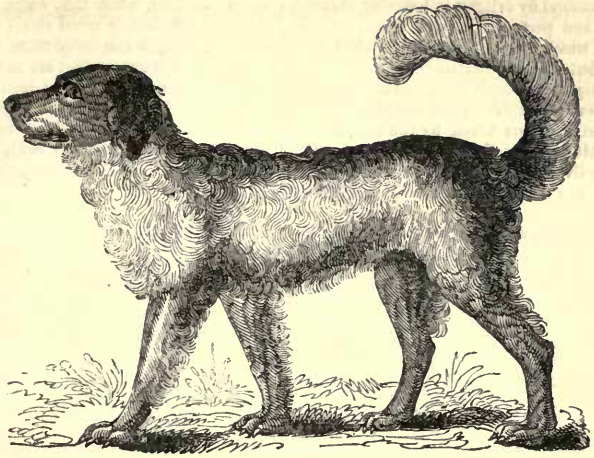
Mutton, *s.* The flesh of sheep dressed for food; a sheep.

Muzzle, *s.* The mouth of any thing; a fastening for the mouth which hinders to bite; a contrivance to prevent a horse from eating hay or litter.

Muzzle, *v.* To secure the mouth.

Myopy, *s.* Shortness of sight.

Myrrh, *s.* A precious kind of gum. Myrrh is sometimes used in veterinary practice. The tincture is a favourite remedy with grooms and farriers, for recent wounds. The dose of myrrh is from one or two to three drachms.



NEWFOUNDLAND DOG.

NAG, *s.* A small horse; a horse in familiar language.

NAIL, *s.* The horny substance at the ends of the fingers and toes; the talons of birds and beasts; a spike of metal by which things are fastened together; a stud, a boss; a kind of measure, two inches and a quarter.

NAPE, *s.* The joint of the neck behind.

NARCOTIC, *a.* Producing torpor, or stupefaction.

NARES, *s.* The hawk's nostrils.

NARROW, *a.* Not broad or wide.

NARROW-HEELS, *s.* A disease in horses.

Chronic lameness may exist in various degrees, and, in the early stages of the disorder, a horse may do considerable work, by paring his feet properly, and keeping them cool and moist; by paring the soles, putting on a wide hollow shoe, and keeping them stopped with tar ointment. By such management the progress of the disease may be retarded, and the horse much relieved; but it can never be cured. Most commonly the disease gradually gets worse, and at length the horse becomes unfit for every kind of work. At this period the horse is generally blistered or fired, and turned to grass. But this never does any good; shoes with claws, or hinges and screws, have been proposed, and employed with a view to open the heels; but of course they have never done any good, either in the way of prevention or cure. The hoof has been all rasped away, and the horse turned to grass until a new hoof has grown down of a proper form, but it has never done any good. That cruel operation of tearing off the sole, technically termed drawing the sole, was formerly practised for it, but is now, I trust, completely discontinued. In short, every thing that human ingenuity can devise has been tried, but nothing has ever been found to cure this disorder. I believe at this time all veterinarians agree in the opinion of its being absolutely incurable.—*Blaine.*

NATIVE, *a.* Produced by nature, not artificial; natural, such as is according to nature; conferred by birth; pertaining to the time or place of birth, original.

NATURAL, *a.* Produced or effected by nature.

The natural fly delights in hovering over the stream, and performs it with that ease and beauty, which cannot be attained with the artificial, but the former often drowns when tired of making its airy evolutions, and it is then the latter best resembles it, and as a drowned fly is the artificial one taken by the fish, no art being able to make that play upon the water like the living one.

This way of angling is chiefly adapted to warm weather, when the water is low and clear; and is best in small rivers and brooks, where the angler can keep more out of sight than near large waters, that are more exposed. He must have a long rod, as before described for artificial fly fishing; the line fine for nearly the whole length of it (which is not to exceed three fourths of that of the rod), with a fine short shanked hook, in size proportioned to the baits.

NAVE, *s.* The middle part of the wheel in which the axle moves; the middle part of the church, distinct from the aisles or wings.

NAVELGALL, *s.* Navelgall is a bruise on the top of the chine of the back, behind the saddle, right against the navel.

NEAP, *a.* Low, decrescent.

NEAT, *s.* Black cattle, oxen; a cow or ox.

NEAT'S-FOOT OIL, *s.* Is extracted from the feet of oxen, &c.; it is used in lubricating stiff joints, old sprains, &c., and is an excellent preservative of harness and leather.

NEB, *s.* Nose, beak, mouth. In Scotland, the bill of a bird.

NEBULA, *s.* It is applied to appearances like a cloud in the human body, as to films upon the eye.

NECK, *s.* The part between the neck and the body; a long narrow part.

The neck should form from the head to the withers, an elegant but moderate curve, with which it should unite with a very moderate depression only; while its under surface ought to be but very slightly incurvated, and should enter the chest rather above the point of his shoulders. A large prominent windpipe adds to the perfection of the lower surface of the neck. In point of length, it is of consequence that the neck be duly proportioned. The long neck, when thin withal, seldom presents a firm or proper resistance against the pressure of the bit. When, on the contrary, the neck is too short, the head is frequently ill placed, and the lever in the hand of the rider will be also too short. Such necks are often likewise weighty, and overloaded with flesh. It is evident, also, that such cannot be reined up without danger of suffocation; and it is seldom that a short-necked horse is speedy. When the upper surface of the neck is thick and heavy, it is a very strong presumption of a sluggish disposition, particularly in geldings and mares. In stallions, it is a *distinctive sexual* mark, and hence less to be depended on. Now and then, the neck is arched downwards, which is called ewe-necked. When the deformity is considerable, it prevents the head from being carried in its true angle; instead of which, the nose, from being projected upwards and forwards, has occasioned such horses to be called stargazers; to remedy which, it is usual to draw the head down by a martingal. In the horse, as well as in all the grazing tribes, the length of the well proportioned neck is such, that, adding to it the angle resulting from the head, the length of both is equal to the height of the shoulders from the ground. It may not, also, be amiss to mention, that, in the purchase of a horse, it is prudent to observe whether the upper part of the neck bears any marks of a tight collar having been worn: when such an appearance does exist, it commonly arises either from a strap worn to prevent the action of crib-biting, or such a horse is apt to unloose himself, which is almost an equal defect.—*Blaine.*

NEEDLE, *s.* A small instrument pointed at one end to pierce cloth, and

perforated at the other to receive the thread; the small steel bar which, in the mariner's compass, stands regularly north and south.

NEIGH, *v.* To utter the voice of a horse.

NEIGH, *s.* The voice of a horse.

NERVE, *s.* The nerves are the organs of sensation passing from the brain to all parts of the body; it is used by the poets for sinew or tendon.

Neurotomy.—A question has arisen how far a horse that has undergone the operation of the division of the nerve of the leg, and has recovered from the lameness with which he was before affected, and stands his work well, may be considered to be sound. In our opinion there cannot be a doubt about the matter. Does the operation of neurotomy render a horse as capable of work as he was before he became affected with the disease on account of which, and to relieve him from the torture of which, the nerve was divided? Is the operation of neurotomy so invariably followed by capability, and continued capability of ordinary and even extraordinary work, that they may regularly be considered as cause and effect? The most strenuous defenders of the nerve operation cannot affirm this. They can only say that they partially succeed in almost every fair case,—that they perfectly succeed in the majority of cases; but they cannot deny that the horse will batter and bruise that foot, when he has lost sensation in it, which should have been tenderly used; that even the hoof will sometimes be lost, after operations performed with the greatest judgment; that the lameness will sometimes return, after the animal has gone sound, one, two, or three years; and that, after all, there is a little unpleasantness, and even unsafeness in the action of the horse, from the peculiar manner in which the foot meets the ground when its feeling is destroyed; and that the horse is more liable to accidents, for he will travel on without warning his rider of the evil, after a piece of glass has penetrated his foot, or a stone has insinuated itself between the sole and the shoe; and thus irreparable mischief will be done, before the cause of it can possibly be detected. A horse on whom this operation has been performed may be improved—may cease to be lame, may go well for many years; but there is no certainty of his continuing to do so, and he is unsound.

* * *

Poiet.—These, as well as the omens of death watches, dreams, &c., are for the most part founded upon some accidental coincidences; but spilling of salt on an uncommon occasion may, as I have known it, arise from a disposition to apoplexy, shown by an incipient numbness of the hand, and may be a fatal symptom; and persons dispirited by bad omens sometimes prepare the way for evil fortune, for confidence in success is a great means of ensuring it.

I knew a man of very high dignity, who was exceedingly moved by these omens, and who never went out shooting without a bittern's claw fastened to his button-hole by a riband.

* * *

Under these circumstances a man must either pick his shots or occasionally miss, though his gun be every time held straight. I venture to say there is no sportsman living who has not been known to miss the fairest shots, and there are very few but now and then in a season will shoot badly for a whole day. It stands to reason when the most skilful may become for a time unnerved for shooting by ill health, oppression of mind, one night's debauch, or anything that will operate on the temper or nerves.—*The Horse —Sir Humphry Davy—Hawker.*

NEST, *s.* The bed formed by the bird for incubation; any place where insects are produced; an abode; boxes of drawers, little conveniences.

NEST, *v.* To build nests. *Vide* NIDIFICATION.

NESTEGG, *s.* An egg left in the nest to keep the hen from forsaking it.

NESTLE, *v.* To house, as in a nest; to cherish, as a bird her young.

NESTLING, *s.* A bird taken out of the nest.

NET, *s.* A texture woven with large interstices or meshes, used for taking fish and birds. Game is frequently thus poached, and to the smaller kinds, particularly snipes, the net is very destructive.

The snipe net seems to be the most destructive, and is used with great success in Ireland, as follows: it must be about half as long again as the partridge-net, with the meshes

much smaller and not quite so deep; two strong men hold each end of the net, and run down the wind with it, as fast as possible, having not time even to look where they are going, as they must constantly mind the net, to see when a bird strikes it, that they may let it fall, by which means they secure these birds; they get, of course, very severe falls, from the attention they are obliged to pay to the net, but are amply repaid, it being no uncommon circumstance for them to take one or two hundred brace, in a very few hours (especially if the day is dark and windy, which is the most favourable time both for gun and net). The top part of the net gets so forward, that by the time the snipe perceives it, and rises, on striking the lower part of it, he is secured. One netted snipe is worth twenty that are shot.

* * *

Anecdote of Netting Snipes.—Visionary in the extreme were many of the devices which entered into his head in regard to compassing the wild fowl, that resorted hither in astonishing abundance; in two only of those which he put into execution was he successful; namely with the talking hare, and the snipe net. Of his numberless expeditions with the latter, one is worthy of recital. It was at the close of a cold winter's day, when John and an attendant sallied forth from Grenton for the moor, anticipating much sport, as the wind and the complexion of the evening seemed particularly favourable; moreover they soon encountered a hail-storm, which made the birds lie to their perfect satisfaction.

They had at length taken a quantity of snipes, and were thinking about returning, when something struck the net with unusual force, and struggled so, that the poles were with difficulty kept to the ground. What have we here, said the attendant, calf, sheep, hog, dog, or goat? It is the d—l, I believe, replied John, and if we can but hold him fast, we shall have made a tolerable night's work of it. The net had enclosed a goose of a coarse dun-coloured plumage, no one knew what sort of a goose it was, but it was allowed to be the largest aquatic bird, the hooper excepted, ever taken on King's Sedgmoor.—*Thornhill—Sporting Anecdotes.*

NETWORK, *s.* Anything resembling the work of a net.

NEUROLOGY, *s.* A description of the nerves.

NEUROTOMY, *s.* *Vide* NERVE.

NEWFOUNDLAND DOG (*Canis Sensilis*), *s.*

In a state of purity, and uncontaminated by a mixture of any inferior race, this is certainly the noblest of the canine tribe. His great size and strength, and majestic look, convey to the mind a sort of awe, if not fear, but which is quickly dispelled when we examine the placid serenity and the mild expressive intelligence of his countenance, showing at once that ferocity is no part of his disposition.

The full-sized Newfoundland dog from the nose to the end of the tail measures about six feet and a half, the length of the tail being two feet; from the one fore foot to the other, over the shoulders, five feet eight inches; girth behind the shoulders three feet four inches; round the head, across the ears, two feet; round the upper part of the fore leg, ten inches; length of the head, fourteen inches; and his feet are webbed, by which means he can swim with great ease. He is covered with long shaggy hair, has feathered legs, and an extremely villous tail, which is curvilinear.

This dog is but of recent introduction into this country from the island whose name he bears, and may be considered as a distinct race. I cannot agree with some naturalists who hold the opinion that the Siberian, Lapland, and Iceland dogs are from the same stock as the Newfoundland, because the formation of the head in this last is very different, and his muzzle, though long, is not nearly so acute as in the others; he also differs materially in his shape, but more especially in the length of his body.

This dog is not remarkable for symmetry of form, or in the setting on of his legs, whence his motion is somewhat awkward and loose, and consequently he is not distinguished for speed,—a defect which might be remedied by breeding, were an improvement in that particular thought desirable.

The Newfoundland dog is docile to a very great degree, and nothing can exceed his affection. Naturally athletic and active, he is ever eager to be employed, and seems delighted to perform any little office required of him. Nature has given him a great share of emulation, and hence to be surpassed or overcome is to him the occasion of great pain. Active on every emergency, he is the friend of all, and is naturally without the least disposition to quarrel with other animals. He seldom or never offers offence, but will not receive an insult or injury with impunity. Such is the capacity of his understanding, that he can be taught almost everything which man can inculcate, and of which his own strength and frame are capable. His sagacity can only be exceeded by his energies, and he perseveres

with unabated ardour in whatever shape he is employed, and while he has a hope of success he will never slacken in his efforts to attain it. The amazing pliability of his temper peculiarly fits him for the use of man, and he never shrinks from any service which may be required of him, but undertakes it with an ardour proportionate to the difficulty of its execution. Taking a singular pride in being employed, he will carry a stick, a basket, or a bundle, for miles in his mouth, and to deprive him of any of these is more than a stranger could accomplish with safety.

Sagacity and a peculiar faithful attachment to the human species are characteristics inseparable from this dog, and hence he is ever on the alert to ward off from his master every impending danger, and to free him from every peril to which he may be exposed. He is endowed with an astonishing degree of courage, whether to resent an insult or to defend his friends, even at the risk of his own life.

Habitually inclined to industrious employment, such dogs are as useful to the settlers of the coast from which they are brought, as our ponies and galloways are to us. It is easy to accustom them to daily labour. From three to five of them are harnessed to a sledge or other vehicle, containing a load of wood or lumber, amounting to twenty or thirty stone, which they steadily draw for miles with ease. This they do without the aid of a driver, when they are acquainted with the road, and having delivered their burden, they return home to their master, and receive as a reward for their labour their accustomed food, which generally consists of dried fish, of which they are said to be extremely fond. The qualifications of this dog are extensive indeed; as a keeper or defender of the house, he is far more intelligent, more powerful, and more to be depended upon than the mastiff, and has of late years been much substituted for him in England; indeed he may with great propriety entirely supersede that breed. As a watch dog, and for his services upon navigable rivers, none can compete with him; and various sportsmen have introduced him into the field as a pointer with great success, his kind disposition and sagacity rendering his training an easy task.

The usual fate of other fine dogs attends this generous race among us; they are too often degraded and degenerated by inferior crosses, which with so noble an animal should be avoided by every possible means.

At the commencement of the action which took place between the Nymph and Cleopatra, during the late war, there was a large Newfoundland dog on board the former vessel, which the moment the firing began ran from below deck, in spite of the endeavours of the men to keep him down, and climbing up into the main-chains he there kept up a continual barking, and exhibited the most violent rage during the whole of the engagement.

When the Cleopatra struck, he was among the foremost to board her, and there walked up and down the decks, seemingly conscious of the victory he had gained.

Newt, *s.* Eft, small lizard.

Nibble, *v.* To bite by little at a time, to eat slowly; to bite as a fish does the bait; not to bite sportingly.

Nick, *s.* A notch cut in anything; in hazard, a winning throw.

Nick, *v.* To hit, to touch luckily; to cut in nicks or notches; to suit, as tallies cut in nicks; a term at hazard; to shorten a horse's tail.

The operation of nicking is thus performed. The side line is put on the horse, or some deem it more prudent to cast him, and that precaution we should be disposed to recommend. The hair at the end of the tail is securely tied together for the purpose of afterwards attaching a weight to it. The operator then grasps the tail in his hand, and lifting it up, feels for the centre of one of the bones (the prominences at the extremities will guide him to this), from two to four inches from the root of the tail, according to the size of the horse. He then with a sharp knife divides the muscles deep from the edge of the tail on one side to the centre, and continuing the incision across the bone of the tail, he makes it as deep on the other side. One continued incision, steadily, yet rapidly, made, will accomplish this. If it be a blood horse this will be sufficient. For a hunter, two incisions are usually made, the second being about two inches below the first, and likewise as nearly as possible in the centre of one of the bones; the reason of which is, that the incision, in order perfectly to divide the muscles that bring down the tail, must not be so deep, as, in the neighbourhood of a joint, to endanger the wounding of the ligament which ties the bones together, or the substance which is interposed between the joints, and thus by destroying the joint to render the tail deformed.

On a hackney, or cocktail, a third incision is made; for fashion has decided that his tail shall be still more elevated and curved. Two incisions only are made in the tail of a mare, and the second not very deep.

When the second incision is made, some fibres of the muscles between the first and

second incisions will project into the wounds, and which must be removed with a pair of curved scissors. The same must be done with the projecting portions from between the second and third incisions; and the wounds should be carefully examined to ascertain that the muscles have been equally divided on each side, otherwise the tail will be carried awry. This being done, pledgets of tow must be introduced deeply into each gap, and confined, but not too tightly, by a bandage. A very profuse bleeding will alone justify any tightness of bandage; and the ill consequences which have resulted from re-nicking are mainly attributable to the unnecessary force which is used in confining these pledgets. Even if the bleeding, immediately after the operation, should have been very great, the roller must be loosened in two or three hours, otherwise swelling and inflammation, or death, may possibly ensue. Twenty-four hours after the operation, the bandage must be quite removed; and then, all that is necessary, so far as the healing of the wounds is concerned, is to keep them clean.

NIDE, *s.* A brood, as a nide of pheasants.

NIDIFICATION, *s.* The act of building nests.

It is curious to observe with what different degrees of architectonic skill Providence has endowed birds of the same genus, and so nearly correspondent in their general mode of life; for while the swallow and the house martin discover the greatest address in raising and securely fixing crusts or shells of loam as *cunabula* for their young, the bank martin terebrates a round and regular hole in the sand or earth, which is serpentine, horizontal, and about two feet deep. At the inner end of this burrow does this bird deposit, in a good degree of safety, her rude nest, consisting of fine grasses and feathers, usually goose feathers, very inartificially laid together.

Perseverance will accomplish any thing: though at first one would be disinclined to believe that this weak bird, with her soft and tender bill and claws, should ever be able to bore the stubborn sandbank without entirely disabling herself; yet with these feeble instruments have I seen a pair of them make great despatch: and could remark how much they had scooped that day by the fresh sand which ran down the bank, and was of a different colour from that which lay loose and bleached in the sun.

In what space of time these little artists are able to mine and finish these cavities I have never been able to discover, for reasons given above; but it would be a matter worthy of observation, where it falls in the way of any naturalist to make his remarks. This I have often taken notice of, that several holes of different depths are left unfinished at the end of summer. To imagine that these beginnings were intentionally made in order to be in the greater forwardness for next spring, is allowing perhaps too much foresight and *rerum prudentia* to a simple bird. May not the cause of these *latebræ* being left unfinished, arise from their meeting in those places with strata too harsh, hard, and solid, for their purpose, which they relinquish, and go to a fresh spot that works more freely? Or may they not in other places fall in with a soil as much too loose and mouldering, liable to founder, and threatening to overwhelm them and their labours?

One thing is remarkable—that, after some years, the old holes are forsaken and new ones bored; perhaps because the old habitations grow foul and fetid from long use, or because they may so abound with fleas, as to become untenantable. This species of swallow, moreover, is strangely annoyed with fleas; and we have seen fleas, bed fleas, (*Pulex irritans,*) swarming at the mouths of these holes, like bees on the stools of their hives.—*White's Selborne.*

NIGHTCROW, *s.* A bird that cries in the night.

NIGHT-FISHING, *s.*

Night-fishing is carried on when the river is low, and the night moonless. The poacher, with a gaff and torch, selects some gravelly ford—for there, by a law of nature, the salmon resort, to form beds in the stream, wherein to deposit their ova; and they continue working on the sand, until they are discovered by torch-light, and gaffed by the plunderer. Hundreds of the breeding fish are annually thus destroyed; and although the greater fisheries may be tolerably protected, it is impossible to secure the mountain streams from depredation.—*Wild Sports.*

NIGHTINGALE, *s.* A bird that sings in the night with remarkable melody.

One of the finest songsters of the feathered race, generally visiting us, about London, the beginning of April; in Somersetshire it seldom arrives till the middle or latter end of that month, and sometimes not till the beginning of May; Devonshire, and Cornwall, and

some other counties, it does not visit at all: it generally leaves us again the beginning of September. Its song, when wild, is very fine, but lasts but a few weeks; to have it in the greatest perfection is to have a good bird in a cage, where, if it be a very kindly one, it will begin singing the beginning of December, and continue till June. I had a very fine one that only left off singing the latter end of June last; it began again a little in September, and the 1st of December it was in full song, and continued to sing through the whole of the month, and nearly all day long, as fine as if at Midsummer, and would have continued on had not the frost set in so severe; when singing in a cage none of the soft notes are lost, they are all heard quite clear, which is not the case when heard in the woods or hedges.

The best way to be certain of a good nightingale is to get one that is just caught in spring; for there is no dependence on a young one bred up from the nest, or a young brancher, except it be kept with a good old bird, to learn its proper notes from; a young one being apt to catch all it hears, good or bad, and to be deficient of many of its natural ones. I had one three years, and it never sang worth any thing; the year before last I turned it out, and it continued in the gardens round the house until it left the country in autumn; it returned back to the same place last spring, where I recognised it by its bad song, and it continued about the same place all the summer, and bred up a nest of young ones. A female that I had also been keeping for six years, to see if she would breed, I also turned out with him, but whether she came back and was partner in the nest I cannot say, as I had no mark to know her by: this female I kept four years, and it never attempted to sing; the fifth year it sang frequently, a pretty soft nightingale's note. I have found that the case with several female birds; they do not sing till they become aged; but it is not a general rule, as I have had a female willow wren that sang when quite young.

I treat my nightingales in exactly the same manner as the before-mentioned birds, which is at variance with the bird-fanciers' method, who feed them on grated beef and egg, and German paste; but I have never heard of any thing being kept many years on that food: the German paste I do not approve of at all, as the maw-seeds, honey, sugar, and such out of the way ingredients, I am convinced must be very injurious to their health. The best thing to keep them in good health and spirits, is to give them as much insect food as possible, and there are scarcely any insects they will refuse, except the common earth-worm and the hairy caterpillars; they are particularly fond of ants and their eggs, for which they will leave any other food; they are also very partial to all sorts of smooth caterpillars, earwigs, crickets, grasshoppers, cockroaches, common maggots, and meal-worms; but there is nothing that all the birds of this tribe are so fond of, as the young larvæ in the combs of wasps and hornets—they will even eat them after they become winged. I have, when a boy, kept nightingales, blackcaps, the greater pettychaps, and whitethroats, for two months at a time, on nothing else.—*White of Selborne.*

NIMBLE, *a.* Quick, active, ready, speedy, lively, expeditious.

NINEPINS, *s.* A play where nine pieces of wood are set up on the ground to be thrown down by a bowl.

The kayle-pins were afterwards called kettle or kittle-pins; and hence, by an easy corruption, skittle-pins, an appellation well known in the present day. The game of skittles as it is now played, differs materially from that of nine-pins, though the same number of pins are required in both. In performing the latter, the player stands at a distance settled by mutual consent of the parties concerned, and casts the bowl at the pins: the contest is, to beat them all down in the fewest throws. In playing at skittles there is a double exertion; one by bowling, and the other by tipping: the first is performed at a given distance, and the second standing close to the frame upon which the pins are placed, and throwing the bowl through in the midst of them; in both cases, the number of pins beaten down before the return of the bowl, for it usually passes beyond the frame, are called fair, and reckoned to the account of the player; but those that fall by the coming back of the bowl are said to be foul, and of course not counted. One chalk or score is reckoned for every fair pin; and the game of skittles consists in obtaining thirty-one chalks precisely: less loses, or at least gives his antagonist a chance of winning the game; and more requires the player to go again for nine, which must also be brought exactly, to secure himself.

Hanmer intimates that the kittle-pins were sometimes made with bones; and his assertion is strengthened by the language of a dramatic writer, the author of the Merry Milk-maid of Islington, in 1680, who makes one of his characters speak thus to another: "I'll cleave you from the skull to the twist, and make nine skittles of thy bones."—*Strutt.*

Nitrate of Potash, Nitre, or Saltpetre, *s.* A neutral salt, formed by the combination of nitrous acid and potash.

This is a medicine of great utility in veterinary practice. It possesses a cooling and diuretic property, which renders it extremely useful in fevers, and complaints of an inflammatory nature.

In fevers, it is often joined with emetic tartar, or antimonial powder. In catarrh or cold, nitre is the best remedy; and in troublesome coughs it gives relief, if mixed with some emollient drink and a little honey.

The medium dose of nitre is about one ounce, though farriers often give double that quantity, but large doses are apt to irritate the stomach and do mischief. In urgent cases half an ounce may be given every fourth hour, in a mucilaginous drink, or in water-gruel.—*White.*

Nitrous, *a.* Impregnated with nitre.

Noble, *a.* Of ancient and splendid family; exalted to a rank above commonalty; great, illustrious; exalted.

Node, *s.* A knot, a knob; a swelling on the bone.

Nombles, *s.* The entrails of a deer.

Nope, *s.* A kind of bird called a bull-finch or red-tail.

Nose, *s.* The prominence on the face, which is the organ of scent and the emunctory of the brain; scent; sagacity.

Nose, *v.* To scent, to smell.

Nostril, *s.* The cavity in the nose. *Nostrils linear*, in ornithology,—when they are extended lengthwise in a line with the bill, as in divers; *Nostrils pervious*,—when they are open, and may be seen through from side to side, as in gulls, &c.

Nostrum, *s.* A medicine not yet made public, but remaining in some single hand.

Notch, *s.* A nick, a hollow cut in anything.

Nozzle, *s.* The nose, the snout, the end.

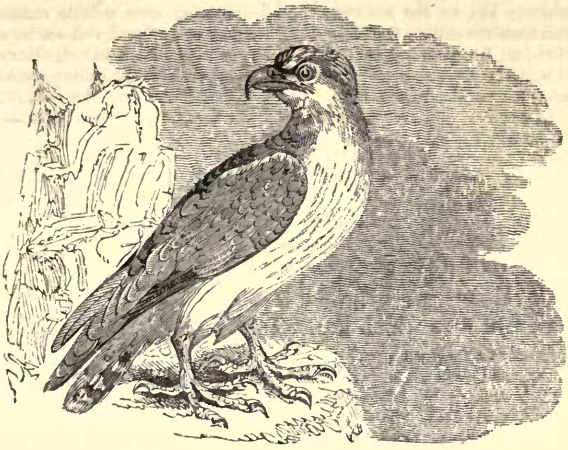
Nut, *s.* The fruit of certain trees: it consists of a kernel covered by a hard shell; a small body with teeth, which correspond with the teeth of wheels.

Nutbrown, *a.* Brown like a nut kept long.

Nuthatch, Nutjobber, or Nutpecker, *s.* A bird.

Nutritious, *a.* Having the quality of nourishing.

Nux Vomica, *s.* A flat compressed round fruit, about the breadth of a shilling, brought from the East Indies. It is a certain poison for dogs, &c. *Vide* Poison.



THE OSPREY.

Oak, *s.* A tree; the wood of the tree.

A decoction of oak-bark is a good vehicle for tonic and astringent medicines. When finely powdered and given as a drench with ginger, it may be of service in those complaints, the continuance of which depends upon debility. It is said, however, to be much less efficacious than Peruvian-bark; yet, when that cannot be procured, it may be found a useful substitute. The dose is about two ounces. — *White.*

Oakapple, *s.* A kind of spongy excrescence in the oak.

Oaken, *a.* Made of oak, gathered from oak.

Oakum, *s.* Cords untwisted and reduced to hemp.

It is somewhat extraordinary that I and other sportsmen, as well as the gun-makers, should never have discovered that a punched wadding on the powder is not the best means of loading a gun. We were all content, because it was ten times better than paper, and therefore it is, and has long been, the universal method of loading. But I was induced to try an experiment at quires of paper, having, as I always do, a clerk, the same as at a cricket match, to take down the advantages of strength and closeness, and then to sum up the evidence and pronounce, like a judge, the grand aggregate of the gun's performance; which, on such occasions, is seldom so undecided as to be merely a matter of opinion. I first tried a pasteboard wadding of Mr. Joseph Manton's, and no one, I presume, will dispute, that both the punch and the wadding, as well as every thing else from Mr. Joseph Manton, must be of the best quality; the one as to fitting well, and the other as to being of good pasteboard. I then tried this duck-gun system of loading, viz.: a piece of coarse tarred oakum (precisely what ships' ropes are made of,) first wound round the finger, so as to be quite hard, and then rolled up in as large a ball as will fit tight into the muzzle, and go with moderate force down the calibre of the gun. (The balls thus rolled up may be readily made and carried in the pocket; and, if of the proper size, will force down the calibre rather quicker than punched wadding. Let the calibre be as large as it may, you of course, with this wadding, require nothing more on the powder.) I then put a common pasteboard wadding (with air vent) on the shot, and I found, that even in small guns, where pasteboard is far

less apt to swerve, this mode of loading threw the shot closer, stronger, and, above all, with less variation in its performance.

In the experiment, I anticipated an increase of recoil, particularly when I came to try it with a detonater; but, on the contrary, the recoil was less from the oakum than from the wadding. The case, I conceive, must be this: the punched wadding gives a severe check at first, but before the powder is half burned, it slips a little on one side, and allows it to mix with the shot; while the oakum has an elastic rotundity, that springs to every gradation, of the calibre; and therefore will never suffer any powder to escape, till it has left the muzzle of the gun.

Moreover, on the other hand, the pasteboard being once a little contracted by the friction, or rendered soft on its edges by the elastic fluid in the barrel, allows the powder to escape where the calibre becomes relieved, and therefore makes the gun, in comparison, shoot thin, weak, and irregular.—*Hawker.*

Oar, *s.* A long pole with a broad end by which boats are propelled.

Oatcake, *s.* Cake made of the meal of oats.

Oaten, *a.* Made of oats, bearing oats.

Oatmalt, *s.* Malt made of oats.

Oatmeal, *s.* Flour made by grinding oats.

Oats, *s.* A grain with which horses are fed.

In the choice of oats for horses, such as are heavy and clean, and sweet, are preferable. New oats are injurious, being difficult of digestion, and apt to scour; but this quality may be, in a great measure, corrected by drying them gradually on a kiln.

Kiln-dried oats are seldom used in Ireland, it being supposed that they are injurious to a horse's wind.

Ocular, *a.* Depending on the eye, known by the eye.

Odd, *a.* Not even, not divisible into equal numbers; particular, uncouth, extraordinary.

Odds, *s.* Inequality; more than an even wager; advantage, superiority.

Offal, *s.* Waste meat, that which is not eaten at the table; carrion; coarse flesh, refuse, that which is thrown away; the food of hounds.

Oil, *s.* Any fat, greasy, unctuous, thin matter.

Oils are fixed or volatile. The former are procured from animal and vegetable substances by heat and pressure, and hence they have been named expressed oils; and are termed fixed, because they do not evaporate, except at a very high temperature. Volatile oils, on the contrary, evaporate readily, and are obtained from vegetables by distillation; and as they commonly contain all the essential qualities of the substance they are procured from, they have been named also essential oils. The numerous officinal oils prescribed in old dispensations are now totally disused.

Oil of Bay.—Is liker an ointment than an oil, of a light green colour. It is used as an external application in cutaneous complaints, as mange. Sometimes it is substituted for hog's lard in making mercurial ointment, and is supposed to render it more active. When to this mixture is added cantharides and oil of origanum, a strong blister is formed, which is recommended for the removal of splents and spavins.

Oil of Castor.—An useful laxative. The dose is about a pint.

Oil of Olive.—This also is a very pure and sweet oil; and in the dose of a pint generally operates as a laxative. When castor oil cannot be easily procured, this may with great propriety be substituted for it. It is used also in making emulsions, liniments, and ointments.

Oil of Linseed.—This also has a laxative quality, but is not so certain in its effect as the castor or olive oil. It is employed as a remedy for coughs; and on such occasions the cold-drawn oil is preferred, *i. e.* that which is expressed from the seed without the assistance of heat.

Oil of Palm or Palm Oil.—This, though termed an oil, is of the consistence of hogs' lard, and very similar to it in its medical qualities.—*White.*

Oil, *v.* To smear or lubricate with oil.

OILY, *a.* Consisting of oil, containing oil, having the qualities of oil; fat, greasy.

OINTMENT, *s.* Unguent, unctuous matter; a sort of cataplasm.

Ointments are composed generally of lard, suet, tallow, bees' wax, oils, resins, and turpentines. The following are those principally used.

SIMPLE OINTMENT.

Olive oil	1 lb.
Bees' wax	3 oz.
Palm oil	2 oz.

Melt over a slow fire, and continue stirring until cold.

For common purposes hogs' lard makes a good simple ointment, but becomes rancid by keeping. The simple ointment may be readily converted into a detergent, a digestive, or an astringent, by the addition of red precipitate, verdigris, or blue vitriol finely powdered, finely powdered alum, superacetate of lead (sugar of lead), or a solution of subacetate of lead.

The following is a very useful ointment for chapped heels, harness galls, &c.

GOULARD OINTMENT.

Simple ointment	1 lb.
Solution of subacetate of lead, commonly called Goulard's extract	3 oz.
Olive oil	1 oz.

Melt the ointment by a very gentle heat, and add the oil, then let it be removed from the fire, and stir it in the Goulard's extract; continue stirring until cold.

SULPHURIC OINTMENT.

Oil of turpentine	6 oz.
Sulphuric acid	2 oz.

Mix cautiously in the open air, or in a chimney, in a vessel large enough to hold one pound and a half; stir the mixture, and, when they are perfectly combined, add one pound and half of hogs' lard: continue stirring until cold. By the addition of cantharides, this ointment forms a strong blister, and with sulphur vivum, finely powdered, or flower of sulphur and train oil, it becomes a good mange ointment.

DIGESTIVE OINTMENT.

Hogs' lard	1 lb.
Common turpentine	1 lb.—Melt, and add
Verdigris	2 oz.

Continue stirring until cold.

HOOF OINTMENT.

Tallow	1 lb.
Tar	1 lb.

Melt; continue stirring until cold.

Ointments are not so generally applied to wounds or inflamed parts, as they were formerly; as powders, washes, and fomentations are often found more efficacious. *Vide* ASTRINGENTS, DIGESTIVES, DETERGENTS, CAUSTICS, EMOLLIENTS, BLISTERS, &c.—*White.*

OLD, *a.* Past the middle of life; not young.

OLIVE, *s.* A plant producing oil; the emblem of peace; a colour.

To dye a fine Golden Olive.—Take as much of fine sappy green heath tops as will half fill a pot which holds eight gallons, put one pound and a half of *strawall* (wild French weed, dyer's weed) in the bottom while dry; spread over that a little of the heath to cover it; put in half a pound of fur, or more if you like; cover that with the remainder of the heath, and put on your frame and lid; press it down and fill it with water, and boil it twelve or eighteen hours. Divide the time to make different shades in your drawings, and do not let your liquor boil away too much without adding fresh water to keep it up. If you have your shades to your wish, you will have the finest golden olives that ever were dyed, and in the simplest way. Wash them, and they are finished.

To dye fine Green Olives.—Take a pound of *strawall*, put it down with eight quarts of water, and half a pound of fur. Cut your strawall short, and put it down. (You ought to have a frame or wooden crop, and a broad piece of lead, to keep down the stuff, as it takes so very long to give out the dye.) When it has boiled about half an hour, see if it is anything of a fine greenish yellow. Draw then for the first shade. Boil half an hour longer; look at it, and if you like it draw it, as it is not right to have your shades too near. For the next shade give double the time, and so on to about four shades. The last ought to get six hours' boiling, and you ought, by rights, to divide the time amongst them all. When you have made out four shades, lift out the dye stuff, and put in the size of a small horse-bean of copperas with the liquor; and, when dissolved, put in each shade, and whip it out, and so on with the whole. If not enough of the olive, add a little more copperas with each, and dip each of them over again. Thus you have four very fine green olives. Wash out the copperas immediately.—*Old Recipe.*

OMBRE, *s.* A game at cards played by three.

Omentum, *s.* The caul, the double membrane spread over the entrails, called also reticulum, from its structure, resembling that of a net.

Ooze, *s.* Soft mud, mire at the bottom of water, slime.

Opacity, *s.* Cloudiness, want of transparency.

Operation, *s.* Agency; action, effect; in chirurgery, that part of the art of healing which depends on the use of instruments.

Ophthalmy, *s.* A disease of the eyes.

Opiate, *s.* A medicine that causes sleep.

Opiate confection is composed of opium, long pepper, and other stimulants. One ounce of the confection does not contain more than fourteen or fifteen grains of opium; it may therefore be given in doses from one to two ounces, though in this quantity it would be a powerful stimulant.

In veterinary medicine, an electuary may be advantageously substituted for the opiate confection of the London dispensatory.

OPIATE CONFECTION, OR ELECTUARY OF OPIUM.

Opium . . .	1½ oz.

Macerate in hot water until it forms a thin paste, or, by stirring, is uniformly mixed, and free from lumps.

Powdered ginger .	3 oz.
Powdered caraway seeds	6 oz.
Powdered allspice .	6 oz.
Treacle . . .	1½ oz.

Let these ingredients be well mixed, and kept in a closed jar or pot. The dose is about one-twentieth part of the mass. It is a warm cordial and diaphoretic, and may be given in flatulent colic mixed with a little warm beer, or infusion of peppermint, or other aromatic herbs. This electuary is a good cordial for cattle. —*White.*

Opium, *s.* A medicine used to promote sleep.

The anodyne quality which renders opium so valuable in human medicine, is not so manifest when given to the horse.

If injudiciously given, opium frequently aggravates the disease, and does injury: and I have several times seen it increase pain, when it has been improperly given as an anodyne. In flatulency or spasm of the bowels it is an excellent remedy, particularly if joined with aromatic powder, ginger, or some other stimulant. In diarrhœa it is an effectual remedy, but must be given cautiously. In diabetes I have found it very beneficial, when joined with bark and ginger. Sometimes it is given with emetic tartar, and some cordial composition, with good effect, and in this way it proves a good diaphoretic.

I have given opium and squill, in obstinate coughs, with success; but the effect is not permanent.

Opium is very apt to produce costiveness in horses; but this may be in a great measure counteracted by exercise: when it does take place, it may be removed by clysters, bran mashes, or a laxative ball.

The medium dose of opium is half a drachm, or two scruples; but if given in the form of clysters, which it sometimes is with the best effect, two drachms will not be too much.

Opium is brought to this country in chests from Turkey and India. The Turkey opium is in flat pieces, covered with leaves and the reddish capsules of some species of dock, which is considered an indication of its goodness, as the inferior kinds of opium have none of these capsules adhering to them. Turkey opium generally contains about one fourth part of impurities. India opium is less pure, is in round masses, covered with leaves to the thickness nearly of one fourth of an inch. Mr. Kerr relates that, at Bahar, it is frequently adulterated with cow dung, the extract of the poppy procured by boiling, and various other substances. It is made also from lettuces, in India.

A celebrated preparation of opium, named the *black drop*, is thus prepared:—

Opium sliced . .	½ pound.
Good verjuice .	3 pints.
Nutmegs . .	1½ oz.
Saffron . .	½ oz.

Boil them to a proper thickness, then add a quarter of a pound of sugar and two spoonfuls of yeast. Set the whole in a warm place near the fire for six or eight weeks, then place it in the open air until it becomes a syrup; lastly decant, filter, and bottle it up, adding a little sugar to each bottle. One drop of this is said to be equal to three drops of the tincture of opium.

The diseases of the horse in which opium is the most beneficial, are locked jaw and flatulent colic; in the former it has been given in large doses, with the best effect, generally joined with camphor, and sometimes with assafœtida and other antispasmodics. In flatulent colic, smaller doses have been found sufficient, which have generally been joined with sweet spirit of nitre, and other carminatives.—*White.*

OPODELDOC, *s.* Soap and camphor dissolved in spirit of rosemary.

It is either liquid or solid. The former is made with soft, and the latter with hard soap. In the solid state it seems to be the same as the celebrated *Steers's opodeldoc.*

It is employed for strains and bruises, after the inflammation which accompanies those complaints at first has subsided.

LIQUID OPODELDOC, OR SOAP LINIMENT.

Soft soap	4 oz.
Water	8 oz.

Mix, and add one pint of rectified spirit of wine, in which there has been previously dissolved—

Camphor	2 oz.
Oil of rosemary	1 oz.

STEERS'S OPODELDOC.

Hard soap	½ oz.
Rectified spirit of wine	8 oz.
Camphor	½ oz.
Oil of rosemary	2 dr.
Oil of lavender, or oil of origanum	2 dr.
Compound spirit of ammonia	4 oz.

Digest in a moderate heat, so as to dissolve the soap, which should be cut up in thin shavings. For these expensive preparations, the following may be substituted:—

VETERINARY OPODELDOC.

Soft soap	4 oz.
Water	8 oz.

Mix over the fire; when cold, add—

Rectified spirit	1 pint.
Oil of rosemary	2 oz.
Strong liquid ammonia	4 oz.—Mix.

ORANGE, *s.* The orange tree; the fruit of the tree.

ORANGE, *a.* Belonging to an orange, of the colour of an orange.

To dye a fine Orange.—If you have half a pound of stuff to dye, you must get an ounce and a half of black grain (cochineal), and pound it fine; put down the stuff in six or eight quarts of water, with turmeric, to bring it to the finest highest yellow that is possible; take it out, and put in the black grain; stir it about well, boil it half an hour. Then put in the stuff for ten minutes, and draw half for the first shade; keep the remainder of the stuff for thirty minutes, then take it out, put two teaspoonfuls of Brazil dust into the pot, and let it boil up. Throw in the light shade, and be watchful lest it get too dark; lift out the stuff, and put in two more spoonfuls of dust, and watch as before, and boil on for a blood orange. This is certainly the best way for oranges in the world.

Should you make your shades too dark, infuse six drops of spirit into the liquor while hot, and any shade you want to brighten throw it in, press it well, and lift out in an instant; and if not to your wish, put in three drops more, and throw the other shades into it, and it will enliven the colour exceedingly. The same may be done with gold colours, and it will brighten them also.

To dye Orange Hackles.—Get white hackles; prepare them as already directed. Ground them richly in turmeric, then put in some cochineal, boil it well, and if you do not soon get a fine rich orange, put in some more cochineal with a pinch of Brazil dust. Let it boil for a time, and then draw for bright orange; put in more cochineal, and a teaspoonful of Brazil dust; boil it well, and you will have a full or deep orange. Draw the hackles, and put in a spoonful or two of Brazil dust, and boil on till you see a fine blood red. These three shades may be distinguished as a bright orange, a blood orange, and a blood red. Archil will give a fourth shade.

* * *

Take care not to dry your hackles too quickly, neither put them too near the fire. Finish one bunch at a time, and draw them constantly through your fingers till dry, as that keeps the hackles in proper form. You should keep the wet hackles rolled up in paper, as, if they dry too fast, they will get ragged and staring, which is a great fault, and can seldom be cured. To stain fine bright golden yellows, follow the same process, with this difference,—that the quantity of turmeric and madder used must be very small, and only two drops of spirits should be infused, if any be necessary.—*Old Recipe.*

ORBITS (*Orbita*, LINN.) In ornithology, the skin which surrounds the eye. It is generally bare, but particularly in the parrot and the heron.

ORC, *s.* A sort of sea-fish.

ORNITHOLOGY, *s.* Natural history of birds.

A good ornithologist should be able to distinguish birds by their air as well as by their colours and shape; on the ground as well as on the wing, and in the bush as well as in the hand. For, though it must not be said that every species of birds has a manner peculiar to itself, yet there is somewhat in most genera at least, that at first sight discriminates

them, and enables a judicious observer to pronounce upon them with some certainty. Put a bird in motion

"—— et vera incessu patuit."

Thus kites and buzzards sail round in circles with wings expanded and motionless: and it is from their gliding manner that the former are still called in the north of England gleads, from the Saxon verb *glidan*, to glide. The kestrel or wind-hover has a peculiar mode of hanging in the air in one place, his wings all the while being briskly agitated. Hen-harriers fly low over heaths or fields of corn, and beat the ground regularly like a pointer or setting-dog. Owls move in a buoyant manner, as if lighter than the air; they seem to want ballast. There is a peculiarity belonging to ravens that must draw the attention even of the most incurious—they spend all their leisure time in striking and cuffing each other on the wing in a kind of playful skirmish; and when they move from one place to another, frequently turn on their backs with a loud croak, and seem to be falling to the ground. When this odd gesture betides them, they are scratching themselves with one foot, and thus lose the centre of gravity. Rooks sometimes dive and tumble in a frolicsome manner; crows and daws swagger in their walk; woodpeckers fly *volatu undoso*, opening and closing their wings at every stroke, and so are always rising or falling in curves. All of this genus use their tails, which incline downward, as a support while they run up trees. Parrots, like all other hook-clawed birds, walk awkwardly, and make use of their bill as a third foot, climbing and descending with ridiculous caution. All the *Gallinæ* parade and walk gracefully, and run nimbly; but fly with difficulty, with an impetuous whirring, and in a straight line. Magpies and jays flutter with powerless wings, and make no despatch; herons seem encumbered with too much sail for their light bodies, but their vast hollow wings are necessary in carrying burthens, such as large fishes, and the like; pigeons, and particularly the sort called smiters, have a way of clashing their wings the one against the other over their backs with a loud snap; another variety called tumblers turn themselves over in the air. Some birds have movements peculiar to the season of pairing; thus ring-doves, though strong and rapid at other times, yet in the spring hang about on the wing in a toying and playful manner: thus the cock-snipe, while breeding, forgetting his former flight, fans the air like the wind-hover; and the greenfinch in particular exhibits such languishing and faltering gestures as to appear like a wounded and dying bird; the kingfisher darts along like an arrow; fern-owls, or goat-suckers, glance in the dusk over the tops of trees like a meteor; starlings, as it were, swim along, while missel-thrushes use a wild and desultory flight; swallows sweep over the surface of the ground and water, and distinguish themselves by rapid turns and quick evolutions; swifts dash round in circles; and the bank martin moves with frequent vacillations like a butterfly. Most of the small birds fly by jerks, rising and falling as they advance. Most small birds hop, but wagtails and larks walk, moving their legs alternately. Skylarks rise and fall perpendicularly as they sing; woodlarks hang poised in the air; and titlarks rise and fall in large curves, singing in their descent. The whitethroat uses odd jerks and gesticulations over the tops of hedges and bushes. All the duck kind waddle; divers and auks walk as if fettered, and stand erect on their tails; these are the *compedes* of Linnæus. Geese and cranes, and most wild fowls, move in figured flights, often changing their position. The secondary *remiges* of *Tringæ*, wild ducks, and some others, are very long, and give their wings, when in motion, a hooked appearance. Dabchicks, moorhens, and coots, fly erect, with their legs hanging down, and hardly make any despatch; the reason is plain, their wings are placed too forward out of the true centre of gravity, as the legs of auks and divers are situated too backward.—*White's Selborne.*

ORTOLAN, *s.* A small bird accounted very delicious.

OSIER, *s.* A tree of the willow kind, growing by the water.

OSPREY, *s.* The sea eagle. *Vide* EAGLE.

Buffon observes that the osprey is the most numerous of the large birds of prey, and is scattered over the extent of Europe, from Sweden to Greece, and that it is found even in Egypt and Nigritia. Its haunts are on the sea shore, and on the borders of rivers and lakes. Its principal food is fish; it darts upon its prey with great rapidity, and with undeviating aim.

OSSIFICATION, *s.* Change of carneous, membranous, or cartilaginous, into bony substance.

Ossification of the cartilages frequently accompanies ringbone, but it may exist without any affection of the pastern joint. It is oftenest found in horses of heavy draught. It arises

not so much from concussion, as from a species of sprain, for the pace of the horse is slow. The cause, indeed, is not well understood, but of the effect we have too numerous instances. Very few heavy draught horses arrive at old age without this change of structure.

In the healthy state of the foot, these cartilages will readily yield to the pressure of the fingers on the coronet over the quarters, but, by degrees, the resistance becomes greater, and at length bone is formed, and the parts yield no more. No evident inflammation of the foot, or great, or perhaps even perceptible lameness accompanies this change; a mere slight degree of stiffness may have been observed, which, in a horse of more rapid pace, would have been lameness. Even when the change is completed, there is not in many cases any thing more than a slight increase of stiffness, little or not at all interfering with the usefulness of the horse. When this altered structure appears in the lighter horse, the lameness is more decided, and means should be taken to arrest the progress of the change: these are blisters or firing; but, after those parts have become bony, no operation will restore the cartilage.—*The Horse.*

Ossifrage, *s.* A kind of eagle.

Osteology, *s.* A description of the bones.

Ostler, *s.* The man who takes care of horses at an inn.

Otter, *s.* An amphibious animal that preys upon fish.

The description of this animal and the mode of destroying it are mentioned on account of its being so inveterate a foe to the fisherman's amusement, for the otter is as destructive in a pond as a polecat in a henhouse. This animal seems to link the chain of gradation between terrestrial and aquatic creatures, resembling the former in its shape, and the latter in being able to remain for a considerable space of time under water, and being furnished with membranes like fins between the toes, which enable it to swim with such rapidity as to overtake fish in their own element. The otter, however, properly speaking, is not amphibious; he is not formed for continuing in the water, since, like other terrestrial creatures, he requires the aid of respiration; for if, in pursuit of his prey, he accidentally gets entangled in a net, and has not time to cut with his teeth the sufficient number of meshes to effectuate his escape, he is drowned. The usual length of the otter, from the tip of the nose to the base of the tail, is twenty-three inches; of the tail itself, which is broad at the insertion and tapers to a point, sixteen; the weight of the male is from eighteen to twenty-six, of the female from thirteen to twenty pounds. One, in October, 1794, was snared in the river Lea between Ware and Hertford, which weighed upwards of forty pounds. The head and nose are broad and flat; the eyes are brilliant, although small; are nearer the nose than is usual in quadrupeds, and placed in such a manner as to discern every object that is above, which gives the otter a singular aspect, not unlike the eel; but this property of seeing what is above gives it a particular advantage when lurking at the

bottom for its prey, as the fish cannot discern any object under them, and the otter seizing them from beneath by the belly readily takes any number with little exertion; the ears are extremely short, and their orifice narrow; the opening of the mouth is small, the lips are capable of being brought very close, somewhat resembling the mouth of a fish; are very muscular, and designed to close the mouth firmly while in the action of diving, and the nose and corners of the mouth are furnished with very long whiskers; it has thirty-six teeth, six cutting and two canine above and below; of the former the middlemost are the least; it has besides five grinders on each side in both jaws. The legs are very short, but remarkably broad and muscular; the joints articulated so loosely, that the otter can turn them quite back, and bring them on a line with its body and use them as fins; each foot has five toes, connected by strong webs like those of a water-fowl; thus nature in every particular has attended to the way of life allotted to an animal whose food is fish, and whose haunts must necessarily be about waters. The otter has no heel, but a round ball under the sole of the foot, by which its track in the mud is easily distinguished, and is termed the seal. The general shape of the otter is somewhat similar to that of an overgrown weasel, being long and slender; its colour is entirely a deep brown, except two small spots of white on each side the nose, and one under the chin; the skin is valuable, if killed in the winter, and makes gloves more durable, and which at the same time will retain their pliancy and softness after being repeatedly wetted, beyond any other leather.

The otter destroys large quantities of fish, for he will eat none unless it be perfectly fresh, and what he takes himself; by his mode of eating them he causes a still greater consumption. So soon as the otter catches a fish, he drags it on shore, devours it to the vent, but, unless pressed by extreme hunger, always leaves the remainder, and takes to the water in quest of more. In rivers it is always observed to swim against the stream, to meet its prey; it has been asserted, that two otters will hunt in concert that active fish the salmon; one stations itself above, the other below where the fish lies, and being thus chased incessantly the wearied salmon becomes their victim. To suppose the otter never uses the sea is a mistake, for they often have been seen in it, both swimming and seeking for their booty, which, in the Orkneys, has been observed to be cod and conger.

In very hard weather, when its natural sort of food fails, the otter will kill lambs, sucking pigs, and poultry, and one was caught in a warren, where he had come to prey on rabbits.

The hunting of the otter was formerly considered as excellent sport, and hounds were kept solely for that purpose. The chase of the otter has still, however, its staunch admirers, who are apparently as zealous in this pursuit as in any other we read of. In 1796, near Bridgnorth, on the river Worse, four otters were killed: one stood three, another four hours, before the dogs, and was scarcely a minute out of sight. The hearts, &c., were eaten by many respectable people who attended the hunt, and allowed to be very delicious; the carcasses were also eaten by the men employed, and found to be excellent; what is a little extraordinary, the account does not state that the partakers of this hard-earned fare were Carthusians.

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As he spoke, I remarked the occurrence which the commander noticed. The fish, which upon our first arrival had risen merrily at the natural flies, ceased on a sudden altogether—now they rushed confusedly through the water, or threw themselves for yards along the surface. It was not the sullen plunge at an insect, or the vertical spring, when sport, not food, brings the salmon over water; but it was evident that there was some hidden cause of alarm, and we were not long left in doubt. Near the neck of the pool, an otter of the largest size showed himself for a moment, then darting under water, the same commotion ensued again. Before a minute elapsed, Andy Bawn pointed silently to a shoal beneath an overhanging bush, and there was the spoiler, apparently resting himself after his successful exertions, and holding a four-pound white-trout in his mouth. Either he noticed us, or had some more favourite haunt to feed in, for he glided into the deep water, and we saw no more of him.

Although we found out that the otter and ourselves could not manage to fish in company, we ascertained that the pool was abundantly stocked with salmon:—during the period of the greatest alarm, at least half a dozen fish were breaking the surface at the same time.

A curious incident, however, supplied us with an excellent white fish. The servant who brought the post bag, when in the act of crossing the river, which in his route from the lodge he was obliged to do repeatedly, most unexpectedly encountered a large otter carrying off a salmon he had just seized. The postman attacked the poacher vigorously, who, dropping his prey, glided off into the deep water at the tail of the ford. The spoil proved to be a fresh salmon not twenty hours from the sea, and consequently in prime condition. The otter showed himself the best artist of the day, for while the Colonel and his companion returned with empty baskets, the little animal managed to secure the finest and freshest salmon in the river.—*Wild Sports.*

OTTERHOUND (*Canis Latrans*), *s.*

The otter hound is a mixed breed between the hardy southern hound and the large rough terrier. His head is large and broad, his ears long and pendulous; he is in size betwixt the harrier and the fox hound; is thick quartered and shouldered; his hair strong and wiry, and somewhat shaggy. He is a bold and fierce dog, and has a full and harmonious voice. He is usually sandy-coloured on the back, the sides, and the neck, with the lower parts white; he carries his tail, which is rough, in the manner of a fox-hound.

Otter hunting, during the reign of Queen Elizabeth, was a favourite amusement amongst the young gentry of Great Britain, at which period that animal was much more numerous than at the present time, being greatly reduced since population became more dense, and gamekeepers more generally used, who employ all kinds of traps and gins to destroy them. Cultivation has also contributed to lessen this destructive creature.

Otter hounds were kept in small packs of from six to sixteen, seldom exceeding that number. The sport of otter hunting is now little understood, and is quite on the decline in this country.

OVAL, *a.* Oblong, resembling the longitudinal section of an egg.

OVERREACH, *v.* A horse is said to over-reach, when he brings his hinder feet too far forwards, so as to strike against his fore-feet.

Under this term are comprised bruises and wounds of the coronet, produced usually in the hind-feet, by the awkward habit of setting one foot upon another, and in the fore-feet, by the hinder one over-reaching it, and wounding the other near the heel. When properly treated, a tread is seldom productive of much injury. If the dirt be well washed out of it, and a pledget of tow dipped in Friar's balsam be bound over the wound, it will, in the majority of cases, speedily heal. Should the bruise be extensive, or the wound deep, a poultice may be applied for one or two days, and then the Friar's balsam, or digestive ointment. Sometimes a soft tumour will form on the part, which will be quickly brought to suppuration by a poultice, and when the matter has run out the ulcer will heal by the application of the Friar's balsam, or a weak solution of blue vitriol.

OVERSET, *v.* To turn the bottom upwards, to throw off the basis; to throw out of regularity; to upset a carriage.

OVIPAROUS, *a.* Bringing forth eggs, not viviparous.

Ounce, *s.* The sixteenth part of a pound in Avoirdupoise weight, the twelfth part of a pound in Troy weight.

Outstrip, *v.* To outgo, to leave behind.

Owl or Owlet, *s.* A bird that flies in the night and catches mice.

The owl is distinguished, among birds of the rapacious kind, by peculiar and striking characters; its outward appearance is not more singular than its habits and dispositions. Unable to bear the brighter light of the sun, the owl retires to some lonely retreat, where it passes the day in silence and obscurity; but on the approach of evening, when all nature is desirous of repose, and the smaller animals, which are its principal food, are seeking their nestling places, the owl comes forth from its lurking holes in quest of its prey. Its eyes are admirably adapted for this purpose, being so formed as to distinguish objects with greater facility in the dusk than in broad day-light. Its flight is low and silent during its nocturnal excursions, and when it rests, it is then only known by its frightful and reiterated cries, with which it interrupts the silence of the night. During the day, the owl is seldom seen, but, if forced from his retreat, his flight is broken and interrupted, and he is sometimes attended by numbers of small birds of various kinds, who, seeing his embarrassment, pursue him with incessant cries, and torment him with their movements: the jay, the thrush, the blackbird, the redbreast, and the titmouse, all assemble to hurry and perplex him. During all this, the owl remains perched upon the branch of a tree, and answers them only with awkward and insignificant gestures, turning his head, eyes, and body, with all the appearance of mockery and affectation. All the species of owls, however, are not alike dazzled and confused with the light of the sun; some of them being able to fly, and see distinctly in open day.

Nocturnal birds of prey are generally divided into two kinds—that which hath horns or ears, and that which is earless or without horns. These horns consist of small tufts of feathers, standing up like ears on each side of the head, which are erected or depressed at the pleasure of the animal; and in all probability are of use in directing the organs of hearing, which are very large, to their proper object. Both kinds agree in having their eyes so formed as to be able to pursue their prey with much less light than other birds. The general character of the owl is as follows:—The eyes are large, and are surrounded with a radiated circle of feathers, of which the eye itself is the centre; the beak and talons are strong and crooked; the body very short, but thick, and well covered with a coat of the softest and most delicate plumage; the external edges of the outer quill feathers in general are finely fringed, which adds greatly to the smoothness and silence of its flight.

The Great-eared Owl. (*Strix Bubo*, Linn; *Le Grand Duc*, Buff.)—This bird

is not much inferior in size to an eagle. Its head is very large, and is adorned with two tufts, more than two inches long, which stand just above each eye, its bill is strong and much hooked; the eyes large, and of a bright yellow; the whole plumage is of a rusty brown, finely variegated with black and yellow lines, spots, and specks; its belly is ribbed with bars of brown colour, confusedly intermixed; its tail is short, marked with dusky bars; its legs are strong, and covered to the claws with a thick close down, of a rust colour; its claws are large, much hooked, and of a dusky colour. Its nest is large, being nearly three feet in diameter; it is composed of sticks bound together by fibrous roots, and lined with leaves. It generally lays two eggs, somewhat larger than those of a hen, and variegated like the bird itself. The young ones are very voracious, and are well supplied with various kinds of food by the parents. This bird has been found, though rarely, in Great Britain; it builds its nest in the caverns of rocks, in mountains, and almost inaccessible places, and is seldom seen on the plains, or perched on trees; it feeds on young hares, rabbits, rats, mice, and reptiles of various kinds.

The Long-eared Owl. (*Horn Owl, Strix Otus,* Linn.; *Le Hibou,* Buff.)—Its length is fourteen inches; breadth, somewhat more than three feet. Its bill is black; irides of a bright yellow; the radiated circle round each eye is of a light cream colour, in some parts tinged with red; between the bill and the eye there is a circular streak, of a dark brown colour; another circle of a dark rusty brown entirely surrounds the face; its horns or ears consist of six feathers, closely laid together, of a dark brown colour, tipped and edged with yellow; the upper part of the body is beautifully pencilled with fine streaks of white, rusty, and brown; the breast and neck are yellow, finely marked with dusky streaks, pointing downwards; the belly, thighs, and vent feathers are of a light cream colour; upon each wing there are four or five large white spots; the quill and tail feathers are marked with dusky and reddish bars: the legs are feathered down to the claws, which are very sharp; the outer claw is movable, and may be turned backwards.

This bird is common in various parts of Europe, as well as in this country; its usual haunts are in old ruined buildings, in rocks, and in hollow trees. M. Buffon observes, that it seldom constructs a nest of its own, but not unfrequently occupies that of the magpie: it lays four or five eggs; the young are at first white, but acquire their natural colour in about fifteen days.

The Short-eared Owl. (*Strix Brachyotus,* Phil. Trans. vol. 62, p. 384.)—Length fourteen inches; breadth three feet. The head is small, and hawklike; bill dusky; the irides are of a bright yellow, and when the pupil is contracted, shine like gold; the circle round each eye is of a dirty white, with dark streaks pointing outwards; immediately round the eye there is a circle of black; the two horns or ears consist of not more than three feathers, of a pale brown or tawny colour, with a dark streak in the middle of each; the whole upper part of the body is variously marked with dark brown and tawny, the feathers are mostly edged with the latter; the breast and belly are of a pale yellow, marked with dark longitudinal streaks, which are most numerous on the breast: the legs and feet are covered with feathers of a pale yellow colour; the claws are much hooked and black: the wings are long, and extend beyond the tail; the quills are marked with alternate bars of a dusky and pale brown; the tail is likewise marked with bars of the same colours, and the middle feathers are distinguished by a dark spot in the centre of the yellow space; the tip is white. Of several of these birds, both male and female, with which this work has been favoured, both sexes had the upright tufts or ears: in one which was alive, they were very conspicuous, and appeared more erect while the bird remained undisturbed; but, when frightened, were scarcely to be seen: in the dead birds they were hardly descernible.

Mr. Pennant seems to be the first describer of this rare and beautiful species, which he supposes to be a bird of passage, as it only visits us in the latter part of the year, and disappears in the spring. It flies by day, and sometimes is seen in companies: twenty eight were once counted in a turnip-field in November. It is found chiefly in wooded or mountainous countries: its food is principally field-mice.

The Female Horned Owl.—This bird is somewhat larger than the former; the colours and marks were the same, but much darker, and the spots on the breast larger and more numerous; the ears were not discernible. Being a dead bird, and having not seen any other at the time, the editors suppose it to be a distinct kind; but having since seen several both males and females, they are convinced of the mistake.

The White Owl, Barn Owl, Church Owl, Gillihowt, Screech Owl, (*Strix Flammea,* Linn.; *L'Effraie, ou, La Fresaie,* Buff.)—Length fourteen inches. Bill pale horn colour; eyes dark; the radiated circle round the eye is composed of feathers of the most delicate softness, and perfectly white; the head, back, and wings, are of a pale chestnut, beautifully powdered with very fine grey and brown spots, intermixed with white; the breast, belly, and thighs, are white; on the former are a few dark spots: the legs are feathered down to the

toes, which are covered with short hairs; the wings extend beyond the tail, which is short, and marked with alternate bars of dusky and white; the claws are white. Birds of this kind vary considerably: of several which were in the hands of the editors, the differences were very conspicuous, the colours being more or less faint according to the age of the bird; the breast in some was white, without spots, in others pale yellow.

The white owl is well known, and is often seen in the most populous towns, frequenting churches, old houses, maltings, and other uninhabited buildings, where it continues during the day, and leaves its haunts in the twilight in quest of its prey. It has obtained the name of screech owl from its cries, repeated at intervals, and rendered loud and frightful from the stillness of the night. During its repose it makes a blowing noise, resembling the snoring of a man. It makes no nest, but deposits its eggs in the holes of walls, and lays five or six, of a whitish colour. It feeds on mice and small birds, which it swallows whole, and afterwards emits the bones, feathers, and other indigestible parts, at its mouth, in the form of small round cakes, which are often found in the empty buildings it frequents.

The Tawny Owl, Common Brown Ivy Owl, or *Howlet.* (*Strix stridula*, Linn.; *Le Chat-huant*, Buff.)—This bird is about the size of the last. Its bill is white; eyes dark blue; the radiated feathers round the eyes are white, finely streaked with brown; the head, neck, back, wing coverts, and scapulars, are of a tawny brown colour, finely powdered and spotted with dark brown and black; on the wing coverts and scapulars are several large white spots, regularly placed so as to form three rows; the quill feathers are marked with alternate bars of light and dark brown; the breast and belly are of a pale yellow, marked with narrow dark streaks pointing downwards, and crossed with others of the same colour; the legs are feathered down to the toes; the claws are large, much hooked, and white. This species is found in various parts of Europe; it frequents woods, and builds its nest in the hollows of trees.

The Little Owl. (*Strix passerina*, Linn.; *La Chevêche, ou Petite Chouette*, Buff.)—This is the smallest of the owl kind, not being larger than a blackbird. Its bill is brown at the base, and of a yellow colour at the tip; eyes pale yellow; the circular feathers on the face are white, tipped with black; the upper part of the body is of an olive brown colour; the top of the head and wing coverts are spotted with white; the breast and belly white, spotted with brown; the feathers of the tail are barred with rust colour and brown, and tipped with white; the legs are covered with down of a rusty colour mixed with white; the toes and claws are of a brownish colour. It frequents rocks and caverns and ruined buildings, and builds its nest, which is constructed in the rudest manner, in the most retired places; it lays five eggs, spotted with white and yellow. It sees better in the day time than other nocturnal birds, and gives chase to swallows and other small birds on the wing; it likewise feeds on mice, which it tears in pieces with its bill and claws, and swallows them by morsels; it is said to pluck the birds which it kills before it eats them, in which it differs from the other owls. It is rarely met with in England; it is sometimes found in Yorkshire, Flintshire, and in the neighbourhood of London.

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Having some acquaintance with a tame brown owl, I find that it casts up the fur of mice, and the feathers of birds in pellets, after the manner of hawks; when full, like a dog, it hides what it cannot eat.

The young of the barn-owl are not easily raised, as they want a constant supply of fresh mice: whereas the young of the brown owl will eat indiscriminately all that is brought; snails, rats, kittens, puppies, magpies, and any kind of carrion or offal.—*Bewick*—*White's Selborne.*

Owler, *s.* One who catches owls. Owling, Owl catching.

Owlery, *s.* A place where owls are kept.

The Owlery at Arundel Castle.—We were unwilling to leave this venerable castle without the sight of the owls, which are said to be the finest in Great Britain. We were introduced to an utterly ruined part of the ancient castle, where, upon entering the inclosure, we saw a number of these strange looking creatures, hopping about with an ungraceful gait, and staring at us with looks of wonderful sagacity. One stood at the mouth of a subterraneous excavation, and upon the keeper pronouncing "bow, wow," the owl instantly returned the expression, retiring at the same time back again into his hole, till it actually got out of sight. The other owls were driven by the keeper into one corner of the yard; they ranged themselves along a piece of old timber, altogether presenting a spectacle which raised in my mind some singular emotions. The countenance of the largest of them was marked by an unusual degree of solemnity.

These owls are the finest of the horned kind, and the keeper showed no small pride in the exhibition of them. "Beauty, Beauty," was the name by which he called them toge-

ther, and they seemed to recognise the propriety of the appellation with a becoming consciousness. Upon the justness of this term, however, the keeper and myself were by no means agreed.

With respect to the sight of the owls, they are so overpowered by the brightness of the day, that they are obliged to remain in the same spot without stirring; and when they are forced to leave their retreat, their flight is tardy and interrupted, being afraid of striking against the intervening obstacles. The other birds, perceiving their constrained situation, delight to insult them: the titmouse, the finch, the redbreast, the jay, the thrush, &c. assemble to enjoy the sport. The bird of night remains perched upon a branch, motionless and confounded; hears their cries, which are incessantly repeated, but it answers them only with insignificant gestures, turning round its head and its body with a foolish air. It even suffers itself to be assaulted without making resistance; the smallest, the weakest of its enemies, are the most eager to torment and turn it into ridicule. The keep in which the owls are shown is an undoubted remnant of the original Saxon building, and well worth the attention of the antiquary.

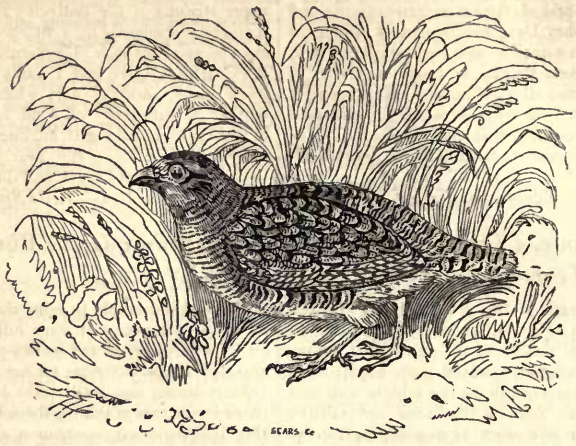
This owlery is thus spoken of by another visiter: "The owls, which are still to be seen, are uncommonly elegant birds, and extremely large, some of them measuring across the wings, when extended, from eight to ten feet. Their plumage is particularly beautiful, and their eyes brilliant. The late duke procured them from North America."—*Evans.*

Ox, *s.* The general name for black cattle; a castrated bull.

Oxalic Acid, *s.* Is extracted from wood sorrel, or from sugar combined with potash. It is commonly sold under the name of salt of lemon, and is useful in removing stains from linen, cleaning boot-tops, &c. It is a deadly poison, and in appearance like Epsom salts. As oxalic acid is a necessary article in a hunting establishment, too great care cannot be taken to prevent those unhappy results which have arisen from mistaking it for Epsom salts, which it so strikingly resembles.

Oxfly, *s.* A kind of fly.

Oyster, *s.* A bivalve testaceous fish. Oysters are taken by a small bag-net extended on an iron frame, which, like the trawl, is swept along the ground by a sailing or row boat.



THE PARTRIDGE.

PACE, *s.* Step, single movement in walking; gait, manner of walking; degree of celerity; a particular movement which horses are taught, though some have it naturally, made by lifting the legs on the same side together; amble.

PACE, *v.* To move on slowly.

PACK, *s.* A large bundle of anything tied up for carriage; a burden; a due number of cards; a number of hounds hunting together; a covey or brood of grouse.

PACK, *v.* To bind up for carriage; to sort the cards so that the game shall be iniquitously secured. Birds are said to pack where several broods collect together. This is particularly the case with grouse and black game.

PACKHORSE, *s.* A horse of burden, a horse employed in carrying goods.

PAD, *s.* A footpath; an easy-paced horse; a low soft saddle.

PADDLE, *v.* To row; to beat water as with oars; to play in the water.

PADDLE, *s.* An oar, particularly that which is used by a single rower in a boat; anything broad like the end of an oar.

PADDOCK, *s.* A great frog or toad; a small enclosure for pasture.

PANCREAS, *s.* The sweetbread.

PAR, *s.* A fish.

The natural history of the samlet, or par, is very doubtful. Some assert it to be a mule produced by the salmon and trout, and as a corroboration of this theory, it is stated that the rivers where the par is found are always resorted to by salmon. Others conjecture it to be a hybrid of the sea and river trout; and Sir Humphry Davy mentions, that fishing in October, in a small stream communicating with the Moy, near Ballina, he caught a number of sea trout, who all proved males, and accordingly infers that "these fish, in which the spermatic system was fully developed, could only have impregnated the ova of the common river trout."

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The par differs from the small mountain trout in colour, and in having additional spines in the pectoral fin. It has also certain olive-bluish marks upon the side, similar to impressions made by the pressure of a man's fingers.

Great numbers of samlet are found in the upper streams of the Ballycroy river. They will rise voraciously at a fly, provided it be gay and small enough. I remember my friend Sir Charles Cuyler and I amused ourselves on a blank shooting day, when there was neither a sufficiency of wind nor water to warrant salmon fishing, in angling for this hybridous diminutive. We nearly filled our basket; we reckoned them, and they amounted to above two hundred.—*Wild Sports.*

PARTRIDGE, (*Tetrao Perdix*, LINN.; *Le Perdrix Grise*, BUFF.) *s.* A bird of game.

The length of this bird is about thirteen inches. The bill is light brown; eyes hazel; the general colour of its plumage is brown and ash, elegantly mixed with black; each feather is streaked down the middle with buff colour; the sides of the head are tawny; under each eye there is a small saffron-coloured spot, which has a granulated appearance, and between the eye and the ear a naked skin of a bright scarlet, which is not very conspicuous but in old birds; on the breast there is a crescent of a deep chestnut colour; the tail is short; the legs are of a greenish white; and are furnished with a small knob behind. The female has no crescent on the breast, and her colours in general are not so distinct and bright as those of the male. Partridges are found chiefly in temperate climates; the extremes of heat and cold are equally unfavourable to them, they are nowhere in greater plenty than in this island, where, in their season, they contribute to our most elegant entertainments. It is much to be lamented, however, that the means taken to preserve this valuable bird should, in a variety of instances, prove its destruction: the proper guardians of the eggs and young ones, tied down by ungenerous restrictions, are led to consider them as a growing evil, and not only connive at their destruction, but too freely assist in it.

Partridges pair early in the spring; the female lays from fourteen to eighteen, or twenty eggs, making her nest of dry leaves and grass upon the ground. The young birds learn to run as soon as hatched, frequently encumbered with part of the shell sticking to them. It is no uncommon thing to introduce partridges' eggs under the common hen, who hatches and rears them as her own, in this case the young birds require to be fed with ants' eggs, which are their favourite food, and without which it is almost impossible to bring them up; they likewise eat insects, and when full grown, feed on all kinds of grain and young plants. The affection of the partridge for her young is peculiarly strong and lively; she is greatly assisted in the care of rearing them by her mate; they lead them out in common, call them together, point out to them their proper food, and assist them in finding it by scratching the ground with their feet; they frequently sit close to each other, covering the chickens with their wings like the hen. In this situation they are not easily flushed; the sportsman, who is attentive to the preservation of his game, will carefully avoid giving any disturbance to a scene so truly interesting, but should the pointer come too near, or unfortunately run in upon them, there are few who are ignorant of the confusion that follows; the male first gives the signal of alarm by a peculiar cry of distress, throwing himself at the same moment more immediately into the way of danger. In order to deceive or mislead the enemy he flies, or rather runs, along the ground, hanging his wings, and exhibiting every symptom of debility, whereby the dog is decoyed, in the too eager expectation of an easy prey, to a distance from the covey; the female flies off in a contrary direction and to a greater distance, but returning soon after by secret ways, she finds her scattered brood closely squatted among the grass, and collecting them with haste she leads them from the danger, before the dog has had time to return from his pursuit. *Vide* SHOOTING.

* * *

A hen partridge came out of a ditch, and ran along shivering with her wings, and crying out as if wounded and unable to get from us. While the dam acted this distress, the boy who attended me saw her brood, which was small and

unable to fly, run for shelter into an old fox-earth under the bank. So wonderful a power is instinct.

It is not uncommon to see an old partridge feign itself wounded, and run along on the ground fluttering and crying before either dog or man, to draw them away from its helpless unfledged young ones. I have seen it often, and once in particular I saw a remarkable instance of the old bird's solicitude to save its brood. As I was hunting with a young pointer, the dog ran on a brood of very small partridges; the old bird cried, fluttered, and ran tumbling along just before the dog's nose till she had drawn him to a considerable distance, when she took wing and flew still farther off, but not out of the field: on this the dog returned to me, near the place the young ones lay concealed in the grass, which the old bird no sooner perceived than she flew back again to us, settled just before the dog's nose again, and by rolling and tumbling about drew off his attention from her young, and thus preserved her brood a second time. I have also seen, when a kite has been hovering over a covey of young partridges, the old birds fly up at the bird of prey, screaming and fighting with all their might to preserve their brood.

* * *

Partridges manifest great caution in choosing the place where they intend having their nest. I have observed them to remain near the same spot for some weeks before the female lays her eggs; and if in the mean time they should discover the retreat of any animal in the neighbourhood, who is likely to be injurious to them, they shift their quarters. I have generally noticed that partridges lodge themselves at night near the middle of a field, probably being aware that they are safer in this situation from the attacks of stoats or weasels, than if they got nearer hedges, under the roots or banks of which these animals conceal themselves. — *Bewick* — *White of Selborne*— *Markwick.*

PASSERINE ORDER, *s.* Birds of the sparrow tribe.

This numerous class constitutes the fifth order in Mr. Pennant's arrangement of British birds, and includes a great variety of different kinds: of these we have detached the stare, the thrush, and the chatterer, and have joined them to the pies, to which they seem to have a greater affinity. Those which follow are distinguished by their lively and active disposition, their beautiful plumage, and delightful melody. Of this order consist those amazing flocks of small birds of almost every description—those numerous families, which universally diffused throughout every part of the known world, people the woods, the fields, and even the largest and most populous cities, in countless multitudes, and every where enliven, diversify, and adorn the face of nature.

The characters of the Passerine order, which are as various as their habits and dispositions, will be best seen in the description of each particular species. It may be necessary, however, to observe, that they naturally divide themselves into two distinct kinds, namely, the hard-billed or seed birds, and the slender or soft-billed birds; the former are furnished with stout bills of a conical shape, and very sharp at the point, admirably fitted for the purpose of breaking the hard external coverings of the seeds of plants from their kernels, which constitute the principal part of their food; the latter are remarkable for the softness and delicacy of their bills; their food consists altogether of small worms, insects, the larvæ of insects, and their eggs, which they find deposited in immense profusion on the leaves and bark of trees, in chinks and crevices of stones, and even in small masses on the bare ground, so that there is hardly a portion of matter that does not contain a plentiful supply of food for this diligent race of beings.—*Bewick.*

PASTERN, *s.* The distance between the joint next the foot and the coronet of a horse.

PASTURAGE, *s.* The business of feeding cattle; lands grazed by cattle; the use of pasture.

PEACOCK, *s.* A fowl eminent for the beauty of his feathers, and particularly of his tail.

The peacock and peahen are always kept by the London dealers, whence any person in the country, desirous of breeding them, may be supplied with breeding stock. Exclusive of the consideration of ornament to a poultry-yard, the peacock is very useful for the destruction of all kinds of reptiles, but at the same time some peacocks are said to be vicious, and apt to tear to pieces and devour young chicks and ducklings, suffered to be within their reach. They are also destructive in a garden.

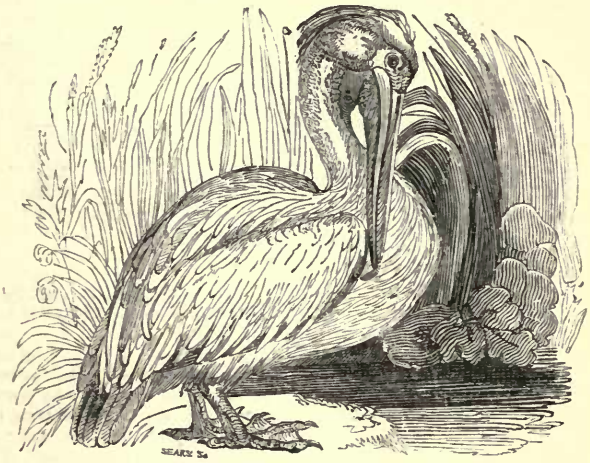
It is asserted by the ancient writers, that the first peacock was honoured with a public exhibition at Athens; that many people travelled thither from Macedonia, to be spectators

of that beautiful phenomenon, the paragon of the feathered race. It is probable the ancients, as well as the moderns, introduced the peacock upon the table, rather as an ornament than a viand. There are varieties of this bird, some white: they perch on trees, like the turkey. Their age extends to twenty years, and at three, the tail of the cock is full and complete. The cock requires from two to four hens, and, where the country agrees with them, they are very prolific. They are granivorous like other domestic fowls, preferring barley.—*Moubray.*

Peck, *s.* The fourth part of a bushel; the stroke of a bird's bill.

Peck, *v.* To strike with the beak as a bird; to pick up food with the beak.

Pelican (*Pelicanus*, Linn.), *s.* There are two sorts of pelicans, one lives upon fish, the other keeps in deserts, and feeds upon serpents; the pelican is supposed to admit its young to suck blood from its breast.



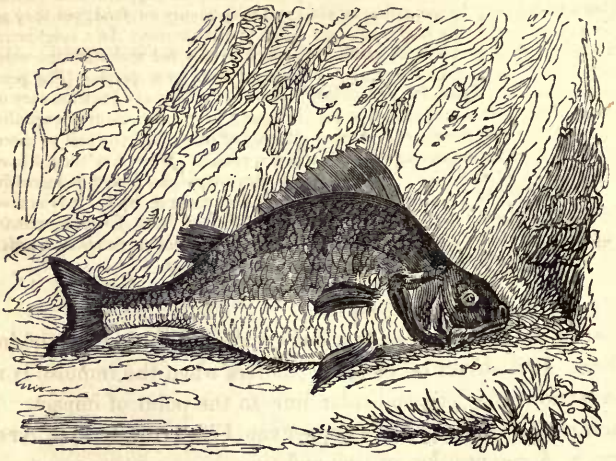
The bill of this genus is long and straight; the end either hooked or sloping; the nostrils placed in a furrow that runs along the sides of the bill, and in most of the species not distinguishable. The face generally destitute of feathers, being covered only with a bare skin: gullet naked, and capable of great distension: body long, heavy, flat: legs placed far backward; toes four in number, and all webbed together.

Latham, following the example of Linnæus, includes the pelican, man-of-war-bird, cormorant, shag, gannet, and booby, in this genus, of which he enumerates thirty distinct species, and two varieties; four only of this number, and one variety, are British birds. In confining the present account to these, it is proper to remark that they are not the inhabitants of this country only, but are widely dispersed over the globe, being met with in almost every climate which navigators have visited, whether temperate, hot, or cold. The gannet only is migratory, large flocks of this species arrive in the spring of the year, and disperse themselves in colonies over the rocky promontories of Scotland, and its isles, in various parts of which they breed and rear their young, and as soon as that office is performed, they retire in the autumn to their unknown abodes. Their return each season points out also that of the shoals of the herrings, which they hover over, pursue, and chiefly feed upon. These shoals, at that season of increasing warmth, are poured forth on their southern route, gliding forward in wide glittering columns of myriads upon myriads, from the unknown but prolific regions of the northern pole. These prodigious shoals with their divisions and subdivisions, in their branched course around the British isles, are attended by the gannet. On our southern coasts the pilchard affords these birds another supply of food, in pursuit of which they are enticed as far southward as the Mediterranean sea.

The cormorant and the shag remain with us throughout the year, but particularly on our more northern shores, upon whose rocky shelving precipices they station themselves, and perform the offices of incubation, while stragglers occasionally taking a wider range, with outstretched neck and vigorous wing sweep along the coast, and entering the mouths of the rivers, follow their course in quest of food, to the lakes inland.—*Bewick.*

PELLET, *s.* A little ball; a bullet, a ball.

PERCH, *s.* A measure of five yards and a half; a pole; something on which birds roost or sit; a kind of fish peculiar to ponds and rivers.



Perch have one particularity, which is contrary to the nature of all fish of prey in fresh water (and they are so voracious as to attack their own kind), that they are gregarious, swimming in shoals. The body of the perch is deep, the scales very rough, the back much arched, and the side-line approaches near it: the irides are golden, the teeth small, disposed in the jaws and on the roof of the mouth, which is large; the edges of the cover of the gills serrated, on the lower end of the largest in a sharp spine, and the head is said to consist of no fewer than eighty bones; the colours of the perch are beautiful, the back and part of the sides being of a deep green, marked with broad black bars pointing downwards; the belly is white, tinged red; the ventral fins of a rich scarlet; the anal fins and tail (which is a little forked,) of the same colour but rather paler.

The perch affords the angler great diversion, and not only the baits are various, but the modes of using them. Of worms, the best kinds are small lob-worms which have no knot, brandlings, red dunghills, or those found in rotten tan, all well scoured; the hook may be be varied from No. 2 to 6, being well whipt to a strong silk-worm gut, with a shot or two a foot from it: put the point of the hook in at the head of the worm, out again a little lower than the middle, pushing it above the shank of the hook upon the gut; take a smaller one, beginning the same way, and bring its head up to the middle of the shank only; then draw the first worm down to the head of the latter, so that the tails may hang one above the other, keeping the point of the hook well covered. This is the most enticing method that can be adopted in worm-fishing; use a small cork float, to keep the bait at six or twelve inches from the bottom, or sometimes about mid-water: in angling near the bottom, raise the bait very frequently from thence almost to the surface, letting it gradually fall again. Should a good shoal be met with, they are so greedy, that they may be all caught, unless one escapes that has felt the hook: then all is over, the fish that has been hooked becomes restless, and soon occasions the whole shoal to leave the place. Two or three rods may be employed, as they require time to gorge sufficient to allow the angler to be prepared to strike them.

Baits for the perch are loaches, sticklebacks, with the spines cut off, miller's-thumbs, horse-beans boiled (after the place has been well-baited with them, put one at a time on the hook), cad-bait, bobs, and gentles.

Although generally termed a bold biter, the perch is extremely abstemious in winter, and

scarcely ever bites in that season, but in the middle of a warm sunshiny day; he bites best in the latter part of the spring, from seven to eleven in the forenoon. and from two to six in the afternoon, except in hot and bright weather, and then from sunrise to six in the morning, and in the eve from six to sunset. If a day be cool and cloudy, with a ruffling south wind, perch will bite during the whole of it. In clear water, sometimes a dozen or more of perch have been observed in a deep hole, sheltered by trees or bushes; by using fine tackle and a well-scoured worm, the angler may see them strive which shall first seize it, until the whole shoal have been caught.

The perch may be angled for and taken until the end of September, and indeed at particular times all the year round; but the preferable season is from the beginning of May, to the middle of July.

* * *

Mr. Young mentions that, at Pakenham, Lord Longford informed him respecting the quantities of fish in the lakes in his neighbourhood, that the perch were so numerous, that a child with a packthread and a crooked pin would catch enough in an hour for the daily use of a whole family, and that his lordship had seen five hundred children fishing at the same time; that, besides perch, the lakes produced pike five feet long, and trout of ten pounds each. * * *

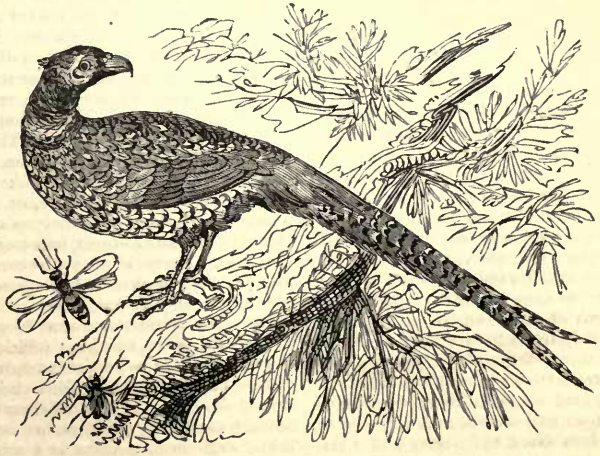
Great numbers of perch are bred in the Hampton Court and Bushy Park ponds, all of which are well supplied with running water, and with plenty of food, yet they seldom arrive at a large size. In a neighbouring pond, which is only fed with drainage water, I have caught very large perch. The perch in the water in the Regent's Park are very numerous. Those I have taken, however, are almost invariably of one size, from half to three-quarters of a pound. Why they should have arrived at this weight and not go on increasing in size, is a circumstance which it is not easy to account for. I have, however, remarked it to be the case in other ponds.—*Daniel*—*Wild Sports*—*Jesse.*

PEWET, *s.* A waterfowl; the lapwing.

PERCUSSION, *s.* The impression a body makes in falling or sticking upon another. It is *direct* or *oblique.* Direct when the impulse is made in the direction of a perpendicular line to the point of impact. Such is the action of a cock upon the copper cap. *Vide* GUN, RIFLE, APPENDIX.

PEWTER, *s.* A composition of lead and tin.

PHEASANT, (*Phasianus Colchicus*, LINN.; *Le Faisan*, BUFF.) *s.* A kind of wild cock; a beautiful large bird of game.



The pheasant is rather less than the common cock. The bill is of a pale horn colour; the nostrils are hid under an arched covering; the eyes are yellow, and surrounded by a

space, in appearance like beautiful scarlet cloth, finely spotted with black; immediately under each eye there is a small patch of short feathers of a dark glossy purple; the upper parts of the head and neck are of a deep purple, varying to glossy green and blue; the lower parts of the neck and breast are of a reddish chestnut, with black indented edges; the sides and lower parts of the breast are of the same colour, with pretty large tips of black to each feather, which in different lights vary to a glossy purple; the belly and vent are dusky; the back and scapulars are beautifully variegated with black and white or cream-colour speckled with black, and mixed with deep orange, all the feathers are edged with black; on the lower part of the back there is a mixture of green; the quills are dusky, freckled with white, wing coverts brown, glossed with green and edged with white; rump plain reddish brown; the two middle feathers of the tail are about twenty inches long, the shortest on each side less than five, of a reddish brown colour, marked with transverse bars of black; the legs are dusky, with a short blunt spur on each, but in some old birds the spurs are as sharp as needles; between the toes there is a strong membrane.

The female is less, and does not exhibit that variety and brilliancy of colours which distinguish the male; the general colours are light and dark brown, mixed with black, the breast and belly finely freckled with small black spots on a light ground; the tail is short, and barred somewhat like that of the male; the space round the eye is covered with feathers.

The ring pheasant is a fine variety of this species; its principal difference consists in a white ring, which encircles the lower part of the neck; the colours of the plumage in general are likewise more distinct and vivid. A fine specimen of this bird was sent us by the Rev. William Turner, of Newcastle, from which the figure was engraven. They are sometimes met with in the neighbourhood of Alnwick, whither they were brought by his grace the Duke of Northumberland. That they intermix with the common breed is very obvious, as in some we have seen the ring was hardly visible, and in others a few feathers only, marked with white, appeared on each side of the neck, forming a white spot. It is much to be regretted that this beautiful breed is likely soon to be destroyed, by those who pursue every species of game with an avaricious and indiscriminating rapacity.

There are many varieties of pheasants of extraordinary beauty and brilliancy of colours; in many gentlemen's woods there is a kind as white as snow, which will intermix with the common ones. Many of the gold and silver kinds, brought from China, are also kept in aviaries in this kingdom; the common pheasant is likewise a native of the East, and is the only one of its kind that has multiplied in our island. Pheasants are generally found in low woody places, on the borders of plains, where they delight to sport; during the night they perch on the branches of trees. They are very shy birds, and do not associate together, except during the months of March and April, when the male seeks the female; they are then easily discoverable by the noise which they make in crowing and clapping their wings, which may be heard at some distance. The hen breeds on the ground like the partridge, and lays from twelve to fifteen eggs, which are smaller than those of the common hen; the young follow the mother as soon as they are freed from the shell. During the breeding season the cocks will sometimes intermix with the common hen, and produce a hybrid breed, of which we have known several instances.

* * *

For shooting pheasants it often becomes necessary to start very early in the morning, as they are apt to lie during the day in high covert, where it is almost impossible to shoot them till the leaf has fallen from the trees. We can never be at a loss in knowing where to go for pheasants, as we have only to send some one the previous evening, for the last hour before sun-set, to watch the different barley or oat stubbles of a woodland country, and on these will be regularly displayed the whole contents of the neighbouring coverts. It then remains to be chosen, which woods are the best calculated to shoot in; and, when we begin beating them, it must be remembered to draw the springs, so as to intercept the birds from the old wood. If the coverts are wet, the hedge-rows will be an excellent beginning, provided we here also attend well to getting between the birds and their places of security. If pheasants, when feeding, are approached by a man, they generally run into covert; but if they see a dog, they are apt to fly up.

* * *

There are very few old sportsmen but what are aware that this is by far the most sure method of killing pheasants, or any other game, where they are tolerably plentiful in covert; and although to explore and beat several hundred acres of coppice, it becomes necessary to have a party with spaniels, yet, on such expeditions, we rarely hear of any one getting much game to his own share, except some sly old fellow, who has shirked from his companions to the end of the wood, where the pheasants, and particularly the cock birds, on hearing the approach of a rabble, are all running like a retreating army, and perhaps flying in his face faster than he can load and fire.

For one alone to get shots in a thick underwood, a brace or two of very well broke spaniels would, of course, be the best. But

were I obliged to stake a considerable bet (taking one beat with another, where game was plentiful), I should back against the sportsman using them, one who took out a very high couraged old pointer, that would keep near him, and would, on being told, break his point to dash in, and put the pheasants to flight before they could run out of shot. This office may be also performed by a Newfoundland dog; but, as first getting a point would direct the shooter where to place himself for a fair shot, the Newfoundland dog would always be best kept close to his heels, and only made use of to assist in this; and particularly for bringing the game; as we rarely see a pointer, however expert in fetching his birds, that can follow and find the wounded ones half so well as the real St. John's Newfoundland dog.

* * *

Lord Stawell sent me from the great lodge in the Holt a curious bird for my inspection. It was found by the spaniels of one of his keepers in a coppice, and shot on the wing. The shape, air, and habit of the bird, and the scarlet ring round the eyes, agreed well with the appearance of a cock pheasant; but then the head and neck, and breast and belly, were of a glossy black: and though it weighed three pounds three ounces and a half, the weight of a large full-grown cock pheasant, yet there were no signs of any spurs on the legs, as is usual with all grown cock pheasants, who have long ones. The legs and feet were naked of feathers, and therefore it could be nothing of the grouse kind. In the tail were no long bending feathers, such as cock pheasants usually have, and are characteristic of the sex. The tail was much shorter than the tail of a hen pheasant, and blunt and square at the end. The back, wing-feathers and tail, were all of a pale russet, curiously streaked, somewhat like the upper parts of a hen partridge. I returned it with my verdict, that it was probably a spurious or hybrid hen bird, bred between a cock pheasant and some domestic fowl. When I came to talk with the keeper who brought it, he told me that some pea-hens had been known last summer to haunt the coppices and coverts where this mule was found.

* * *

The pheasant is not a long-lived bird; but it is probable the period of existence assigned to it by some writers, namely, six or seven years, is too short. The wholesomeness of its flesh was proverbial among the old physicians; it is of a high flavour and alkalescent quality, and in perfection during autumn. A young pheasant very fat is reckoned an exquisite dainty. In a wild state, the hen lays from eighteen to twenty eggs in a season, but seldom more than ten in a state of confinement. Pheasants are not to be tamed by domestication, like other fowls; nor is the flesh of those brought up in the house, in any degree comparable to that of the wild pheasant: thence they are bred at home, either merely for show, or for the purpose of replenishing the proprietor's grounds, both with regard to number or particular varieties. However good nursing mothers in a wild state, pheasant hens are far otherwise in the house, whence their eggs are always hatched at home by the common hen,—generally, at present, by the smooth-legged bantam.

The natural nest of the pheasant is composed of dry grass and leaves, which being provided for her in confinement she will sometimes properly dispose. The cock is bold, voracious, and cruel; and one which I had many years ago, caught a canary bird which had accidentally escaped, and was observed with it beneath his talons, in the proper attitude of the hawk, tearing it to pieces and devouring it. Pheasants have been seen preying upon a dead carcase, in company with carrion crows; and it has been said that they will fall upon a diseased and weak companion of their own species, and devour it. They feed upon all kinds of insects and vermin, like the peacock, and are said to be particularly greedy of toads, provided they be not too large to swallow; whereas, according to report, they will not touch the frog, of which ducks are so fond. A pheasant was shot by T. Day, Esq. of Herts, the crop of which contained more than half a pint of that destructive insect the wire-worm. And the number of 1606 grains of barley were taken from the crop of a pheasant, at Bury, in Suffolk, in 1727.

* * *

The best known varieties of the pheasant, are the golden, the silver, the peacock or spotted, and the common European or English, generally brown, with a less brilliancy of colour. Mr. Castang, however, enumerates six distinct varieties, exclusive of the common, as follow: the gold and silver, natives of China, and very hardy in this country, and good breeders. The ring-necks, natives of Tartary, bred in China, very scarce; their plumage very beautiful. The white and pied; both sorts will intermix readily with our common breed, as will the Bohemian, one of the most beautiful of its kind, and equally scarce. The golden variety is generally of the highest price, the common most hardy and of the largest size.

Breeding Pheasants.—Eggs being provided, put them under a hen that has kept the nest three or four days; and if you set two or three nests on the same day, you will have the advantage of shifting the good eggs. At the end of ten or twelve days, throw away those that are bad, and set the same hen or

hens again, if sitting hens should not be plenty.

The hens having sat their full time, such of the young pheasants as are already hatched put into a basket, with a piece of flannel, till the hen has done hatching.

The brood, now come, put under a frame with a net over it, and a place for the hen, that she cannot get to the young pheasants, but that they may go to her: and feed them with boiled egg cut small, boiled milk and bread, alum curd, ants' eggs, a little of each sort, and often.

After two or three days, they will be acquainted with the call of the hen that hatched them, may have their liberty of running on the grass-plot, or elsewhere, observing to shift them with the sun, and out of the cold winds. They should not have their liberty in the morning till the sun is up; and they must be shut in with the hen in good time in the evening.

Every thing now going on properly, you must be very careful (in order to guard against the distemper to which they are liable) in your choice of a situation for breeding the birds up; and be less afraid of foxes, dogs, pole-cats, and all sorts of vermin, than the *distemper*. I had rather encounter all the former than the latter; for those, with care, may be prevented, but the distemper, once got in, is like the plague, and destroys all your hopes. What I mean by a good situation, is nothing more than a place where no poultry, pheasants, or turkeys, &c. have ever been kept; such as the warm side of a field, orchard, pleasure-ground, or garden, or even on a common, or a good green lane, under circumstances of this kind; or by a wood-side; but then it is proper for a man to keep with them under a temporary hovel, and to have two or three dogs chained at a proper distance, with a lamp or two at night. I have known a great number of pheasants bred up in this manner, in the most exposed situations. It is proper for the man always to have a gun, that he may keep off the hawks, owls, jays, magpies, &c. The dogs and lamps intimidate the foxes beyond any other means; and the dogs will give tongue for the man to be on his guard if smaller vermin are near, or when strollers make their appearance.

The birds going on as before mentioned, should so continue till December, or, if very early bred, the middle of August. Before they begin to shift the long feathers in the tail, they are to be shut up in the basket with the hen, regularly every night; and when they begin to shift their tail the birds are large, and begin to lie out, that is, they are not willing to come to be shut up in the basket. Those that are intended to be turned out wild should be taught to perch (a situation they have never been used to); this is done by tying a string to the hen's leg, and obliging her to sit in a tree all night: be sure you put her in the tree before sun-set; and if she falls down, you must persevere in putting her up again, till she is contented with her situation; then the young birds will follow the hen, and perch with her. This being done, and the country now covered with corn, fruits, and shrubs, &c. &c. they will shift for themselves.

For such young pheasants as you make choice of for your breeding stock at home, and likewise to turn out in the spring following, provide a new piece of ground, large and roomy, for two pens, where no pheasants, &c. have been kept, and there put your young birds in as they begin to shift their tails. Such of them as you intend to turn out at a future time, or in another place, put into one pen netted over, and leave their wings as they are; and those you wish to keep for breeding put into the other pen, cutting one wing of each bird. The gold and silver pheasants you must pen earlier, or they will be off. Cut the wing often; and, when first penned, feed all your young birds with barley-meal, dough, corn, and plenty of green turnips.

A Receipt to make Alum Curd.—Take new milk, as much as your young birds require, and boil it with a lump of alum, so as not to make the curd hard and tough, but custard like.

N. B.—A little of this curd twice a day, and ants' eggs after every time they have had a sufficient quantity of the other food. If they do not eat heartily, give them some ants' eggs to create an appetite, but by no means in such abundance as to be considered their food.

The distemper alluded to above, is not improbably of the same nature as the roup in chickens; contagious, and dependent on the state of the weather; and, for prevention, requiring similar precaution.

General Directions.—Not more than four hens to be allowed in the pens to one cock; and in the out covers, three hens to one cock may be sufficient, with the view of allowing for accidents, such as the loss of a cock or hen. Never put more eggs under a hen than she can well and closely cover, the eggs fresh and carefully preserved. Short broods to be joined and shifted to one hen. Common hen pheasants in close pens, and with plenty of cover, will sometimes make their nests and hatch their own eggs, but they seldom succeed in rearing their brood, being so naturally shy; whence, should this method be desired, they must be left entirely to themselves, as they feel alarm even in being looked at. Eggs for setting are generally ready in April. Period of incubation the same in the pheasant as in

the common hen. Pheasants, like the pea-owl, will clear grounds of insects and reptiles, but will spoil all wall-trees within their reach, by pecking off every bud and leaf.

Feeding.—Strict cleanliness to be observed, the meat not to be tainted with dung, and the water to be pure and often renewed. Ants' eggs being scarce, hog-lice, earwigs, or any insects, may be given; or artificial ants' eggs substituted, composed of flour beaten up with an egg and shell together, the pellets rubbed between the fingers to the proper size. After the first three weeks, in a scarcity of ants' eggs, Castang gives a few gentles, procured from a good liver tied up, the gentles, when ready, dropping into a pan or box of bran; to be given sparingly, and not considered as common food.

Food for grown pheasants, barley or wheat; generally the same as for other poultry. In a cold spring, hemp-seed, or other warming seeds, are comfortable, and will forward the breeding stock. * * *

A New Species of Pheasant.—Amongst the numerous interesting natural productions recently brought from China by Mr. Reeves, it was with pleasure we observed a magnificent new species of pheasant, which will be a most interesting addition to the aviaries of Europe; and as it comes from the same part of the world as the gold and silver kind, there is scarcely a doubt but that, with a little care, it may be induced to breed in this country. It is about three times the size of the common pheasant, and has a tail from five to six feet long; it is of a pale bay colour, ornamented with black moons, and the head, wing, and under part of the body, black varied with white; the tail feathers are black and brown banded. Mr. Reeves brought with him from Canton two living specimens; but one of them unfortunately died in the Channel; the other is now in the gardens of the Zoological Society, where it will most probably recover its fine tail. A beautiful specimen, in nearly perfect plumage, brought by Mr. Reeves for General Hardwicke, has been presented by that gentleman to the collection of the British Museum. The tail feathers of this bird have been long known, two having been exhibited in the Museum for many years; but the bird which bore them was first described in General Hardwick's Illustrations of Indian Zoology, from a drawing sent by Mr. Reeves, where it is called Reeves's pheasant (*Phasianus Reevesii*).—*Daniel—Hawker—Moubray.*

PHRASEOLOGY, *s.* Style, diction; a phrase-book; technical terms.

There was a peculiar kind of language invented by sportsmen of the middle ages, which it was necessary for them to be acquainted with, and some of the terms are still continued.

A sege of herons and of bitterns; an herd of swans, of cranes, and of curlews; a dopping of sheldrakes; a spring of teals; a covert of coots; a gaggle of geese; a badelynge of ducks; a sord or sute of mallards; a muster of peacocks; a nye of pheasants; a bevy of quails; a covey of partridges; a congregation of plovers; a flight of doves; a dule of turkeys, a walk of snipes; a fall of woodcocks; a brood of hens; a building of rooks; a murmuration of starlings; an exaltation of larks; a flight of swallows; a host of sparrows; a watch of nightingales; and a charm of goldfinches.

When beasts went together in companies, there was said to be a pride of lions; a lepe of leopards; an herd of harts, of bucks, and of all sorts of deer; a bevy of roes; a sloth of bears; a singular of boars; a sownder of wild swine; a dryft of tame swine; a route of wolves; a harass of horses; a rag of colts; a stud of mares; a pace of asses; a baren of mules; a team of oxen; a drove of kine; a flock of sheep; a tribe of goats; a skulk of foxes; a cete of badgers; a richness of martins; a fesynes of ferrets; a huske or a down of hares; a nest of rabbits; a clowder of cats, and a kendel of young cats; a shrewdness of apes; and a labour of moles; and, when animals were retired to rest, a hart was said to be harboured, a buck lodged, a roebuck bedded, a hare formed, a rabbit set, a fox kennelled, a martin tree'd, an otter watched, a badger earthed, a boar couched: hence, to express their dislodging they say, unharbour the hart, rouse the buck, start the hare, bolt the rabbit, unkennel the fox, untree the martin, vent the otter, dig the badger, and rear the boar. Two greyhounds were called a brace; three a leash; but two spaniels or harriers were called a couple, and three, a couple and a half; there was also a mute of hounds for a number; a litter of whelps, and a cowardice of curs.—*Strutt—Ascham—Daniel—Book of St. Alban's.*

PIANET, *s.* A bird, the lesser woodpecker; the magpie.

PIE, *s.* A magpie, a particoloured bird.

Birds of this kind are found in every part of the known world, from Greenland to the Cape of Good Hope; the general character of this kind is chiefly as follows:—The bill is strong, and has a slight curvature along the top of the upper mandible; the edges are thin,

and sharp or cultrated; in many of the species there is a small notch near the tip; the nostrils are covered with bristles; tongue divided at the end; three toes forward, one behind, the middle toe connected to the outer as far as the first joint.—*Bewick.*

PIEBALD, *a.* Of various colours, diversified in colour.

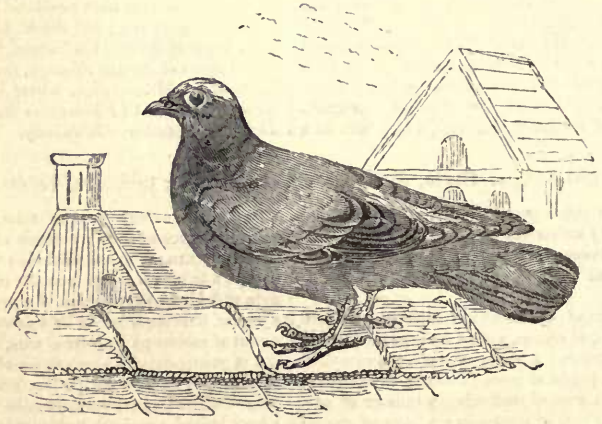
PIED, *a.* Variegated, particoloured.

PIG, *s.* A young sow or boar; an oblong mass of lead or unforged iron.

This instinctive sagacity, which guides animals who have been taken from their old haunts, in making their way back to them, appears in some to whom we should have been least disposed to attribute it. I have an anecdote from a gentleman, who resided some years on an estate high up the Susquehanna, of some pigs, which, having been brought in a sack fifteen miles through an American wood, by the next morning had found their way back, from their new to their old home.—*Jesse.*

PIGEON (*Columba*, LINN.), *s.* A domestic bird.

PIGEONS (*Columbidæ*, LEACH; *Rasores*, ILLIGER), *s.* A family of snatching birds.



Of these the varieties and intermixtures are innumerable, and partake of all those varied hues which are the constant result of domestication. The manners of pigeons are well known, few species being more universally diffused, and having a very powerful wing, they are enabled to perform very distant journeys; accordingly wild and tame pigeons occur in every climate, and although they thrive best in warm countries, yet with care they succeed also in very northern latitudes. Every where their manners are gentle and lively; they are fond of society, and the very emblem of connubial attachment; they are faithful to their mates, whom they solicit with the softest cooings, the tenderest caresses, and the most graceful movements. The exterior form of the pigeon is beautiful and elegant: the bill is weak straight and slender, and has a soft protuberance at the base, in which the nostrils are placed: the legs are short and red, and the toes divided to the origin.

* * *

Buffon enumerates upwards of thirty varieties of the pigeon, which, according to his usual systematic plan—its convenience, perhaps, being rather more obvious than its accuracy—he derives from one root, namely, the stock-dove, or common wild pigeon. All the varieties of colour and form which we witness, he attributes to human contrivance and fancy. There exist, nevertheless, essential specific differences in these birds, which seem rather attributable to the nature of the region, soil, or climate, to which they are indigenous, than to the art of man.

The pigeon is monoganous, that is, the male attaches and confines himself to one

female, and the attachment is reciprocal: the fidelity of the dove to its mate being proverbial. Young pigeons are termed squeakers, and begin to breed at about the age of six months, when properly managed: their courtship, and the well known tone of voice in the cock, just then acquired and commencing, are indications of their approaching union. Nestlings, whilst fed by the cock and hen, are termed squabs, and are at that age sold and used for the table. The dove-house pigeon is said to breed monthly, being well supplied with food, more particularly when the ground is bound by frost, or covered with snow. At any rate, it may be depended on, that pigeons of almost any healthy and well established variety, will breed eight or ten times in the year; whence it may be conceived how immense are the quantities which may be raised.

The first step towards pigeon keeping, is, undoubtedly, to provide a commodious place for their reception, of which I shall afterwards speak; the next, to provide the pigeons themselves. These will be had in pairs, but if not actually matched, pains must be afterwards taken, to that end, that no time be lost; indeed, they may be matched according to the fancy of the keepers, for the purpose of varying the colours, or with any other view. But it is necessary to give a caution on the subject of old pigeons, of which a bargain may offer, since the difficulty of retaining them is so great, indeed insuperable, without the strictest vigilance. Nothing short of cutting their wings, and confining them closely until they have young to attach them to the place, will be a security; and even afterwards, they have been known to take flight with the first use of their wings, and leave their nests. I have had several examples of this. Thence it is always preferable to purchase squeakers, or such as have not yet flown: these, being confined, in a short time, well fed, and accustomed gradually to the surrounding scenery, before they have acquired sufficient strength of wing wherewith to lose themselves, will become perfectly domesticated.

The dove-cote, or pigeon-loft, as to its situation or extent, will necessarily depend on convenience, one general rule, however, must be invariably observed,—that every pair of pigeons have two holes, or rooms, to nest in. Without this indispensable convenience there will be no security, but the prospect of constant confusion, breaking of eggs, and destruction of the young. Pigeons do well near dwellings, stables, bake-houses, brew-houses, or such offices; or their proper place is in the poultry-court. A dove-cote is a good object, situate upon an island, in the centre of a piece of water: indeed, such is a proper situation for aquatic poultry, and rabbits also; and may be rendered extremely beautiful and picturesque by planting, and a little simple ornamental and useful building. Where pigeons are kept in a room, some persons prefer making their nests upon the floor, to escape the danger of the young falling out; but in all probability this is to guard against one risk, and incur a great number, particularly that of rats and other vermin.

The front of the pigeon-room, or cote, should have a south-west aspect; and if a room be selected for the purpose, it is usual to break a hole in the roof of the building for the passage of the pigeons, which can be closed at convenience. A platform is laid by the carpenter at the entrance, for the pigeons to alight and perch upon, with some kind of defence against strange cats, which will often depopulate a whole dove-house; cats are yet necessary, for the defence of the pigeons against rats and mice, as they will both destroy the birds and suck the eggs; thence cats of a known good breed should be trained up familiarly with the pigeons. The platform should be painted white, and renewed as the paint wears off, white being a favourite colour with pigeons, and also most conspicuous as a mark to enable them to find their home. The boxes also should be so coloured, and renewed as necessary, for which purpose lime and water will be sufficient.

Cleanliness is one of the first and most important considerations, the want of it in a dove-cote will soon render the place a nuisance not to be approached, and the birds, both young and old, will be so covered with vermin, and besmeared with their own excrement, that they can enjoy no health or comfort, and mortality is often so induced. Ours were cleaned daily; thoroughly once a week, a tub standing at hand for the reception of their dung, the floor covered with sifted gravel, often renewed. Pigeons are exceedingly fond of water, and having a prescience of rain, will wait its coming until late in the evening, upon the house-top, spreading their wings to receive the refreshing shower. When they are confined in a room, they should be allowed a wide pan of water, to be often renewed, as a bath, which cools, refreshes and assists them to keep their bodies clear of vermin. In the attendance upon pigeons, caution is necessary with respect to their fighting, to which they are more prone than might be expected, often to the destruction of eggs or young, or driving the weakest away.

The common barrel dove-cote needs no description, at the same time it is adapted to every situation in which it is desirable to keep pigeons for ordinary use. To return to the room, or loft; the shelves should be placed sufficiently high, for security against vermin, a small ladder being a necessary ap-

pendage. The usual breadth of the shelves is about twenty inches, with the allowance of eighteen between shelf and shelf, which will be sufficient not to incommode the tallest pigeons. Partitions between the shelves may be fixed at the distance of about three feet, making a blind, by a board nailed against the front of each partition, whence there will be two nests in the compass of every three feet, so that the pigeons will sit in privacy, and not liable to be disturbed. Or a partition may be fixed between each nest;—a good plan, which prevents the young from running to the hen, sitting over fresh eggs, and perhaps occasioning her to cool and addle them, for when the young are about a fortnight or three weeks old, a good hen will leave them to the care of the cock and lay again.

Some prefer breeding-holes entirely open in front, for the greater convenience in cleaning the nests; but it is from those that the squabs are likely to fall, thence a step of sufficient height is preferable. The tame pigeon seldom taking the trouble to make a nest, it is better to give her one of hay, which prevents her eggs from rolling. Or a straw basket, or unglazed earthen pan, may be placed in every nest, apportioned to the size of the pigeons you breed. A pan of three inches high, eight inches over the top, and sloping to the bottom like a basin, will be of sufficient size for a tumbler, or a small pigeon, whilst one of double those dimensions will be required for a large runt. A brick should always be placed in contiguity to the pan, to enable the cock and hen to alight with greater safety upon the eggs. * * *

The pigeon-trap on the house-top is the well-known contrivance of those London rascals, who lie in wait, as has been said, to entrap the property of others. A trap of another description, and for a very different purpose, is sometimes used; it is an area, on the outside of a building, for the purpose of confining in the air valuable breeds of pigeons which cannot be trusted to flight. Some are erected to the extent of twenty yards long and ten yards in width, with shelves on every side for the perching of the pigeons; thus they are constantly exercised in the air, retiring at their pleasure to the room or loft within.

* * *

Very convenient baskets are now made of the cradle form, with partitions, or separate apartments. They serve for the carriage of pigeons for matching, or putting them up to fatten, or for any of the usual purposes. I have seen them lately, in the basket-shops on the Greenwich road, two or three miles from London. * * *

Food and water should be given in such a way as to be as little as possible contaminated with the excrement, or any other impurity. Our pigeons having been constantly attended, we have never found the need of any other convenience than earthen pans; but there have been ingenious inventions for this purpose, of which the meat-box and water-bottle following are specimens. The meat-box is formed in the shape of a hopper, covered at the top to keep clean the grain, which descends into a square shallow box. Some fence this with rails or holes on each side, to keep the grain from being scattered over; others leave it quite open that the young pigeons may the more easily find their food.

The water-bottle is a large glass bottle, with a long neck, holding from one to five gallons, its belly shaped like an egg, so that the pigeons may not light and dung upon it. It is placed upon a stand or three-footed stool, made hollow above, to receive the belly of the bottle, and let the mouth into a small pan beneath: the water will so gradually descend out of the mouth of the bottle as the pigeons drink, and be sweet and clean, and always stop when the surface reaches the mouth of the bottle.

* * *

To match or pair a cock and hen, it is necessary to shut them together, or near and within reach of each other; and the connexion is generally formed in a day or two. Various rules have been laid down, by which to distinguish the cock from the hen pigeon; but the masculine forwardness and action of the cock, is for the most part distinguishable.

* * *

The following singular detection of a thief occurred on a late examination at Queen Square, Westminster:—Mr. Bepy, in the Wandsworth road, had his pigeon-house robbed. A known thief was stopped on the road with six fancy pigeons in his possession, by Sergeant Reardon of the police, and taken before the magistrates, but no evidence appearing against him, he was discharged, and suffered to take away the birds, which he claimed as having purchased them. Cooper, an officer of the court, being somewhat up to the pigeon fancy, and seeing them above the common sort, purchased them, and very commendably determined to find out the real owner, which he effected in the following ingenious mode. Selecting a fine bald-head, he attached a note to its foot, with his address, and then threw up the pigeon, which instantly flew to its own home, and was recovered by its owner, who returned it to Cooper, making him a present of the half-dozen as a reward for his sagacity.

* * *

The starling is a great enemy to pigeons, by sucking their eggs, and even destroying their young. In October, 1800, seven hundred and eighty starlings were taken in one night in a dove-cot belonging to Mr. Slater, of Chalton, near Lincoln. * * *

In 1807, was in the possession of Mr. Knight, of Chichester, a hen pigeon of the pouter species, who, in that summer, hatched three pair of young. She is twenty-one years old, and is considered a remarkable instance of longevity, as Buffon, and other naturalists, have not allowed this bird, from the heat of its nature, above eight or nine years of life, and to be incapable of procreation after seven.

* * *

The penalty for shooting them is 20*s.* for each pigeon. (Under statute of 1 Jac. I.)

For shooting at pigeons, with intent to kill, the penalty would (by 2 Geo. II.) be the same as for killing one pigeon, viz. 20*s.* Informations for these offences must be commenced within two months.

In pigeon-shooting the most extraordinary performance was by Tupor, the gamekeeper of Sir H. Mildmay, (the same person who broke the sow to stand to game,) who, for a considerable wager, shot six pigeons out of ten with a single ball.

Tupor afterwards, to decide a bet, hit a cricket-ball, with common shot, twelve times successively, betwixt the wickets, bowled by Harris, one of the sharpest bowlers in the Hambleton Club. He is also said to have killed swallows with a single ball.

The next was effected by Mr. Elliot, at Rudgewick, in Sussex, who undertook to kill fifty pigeons at fifty shots; it was decided near Petworth, at Tillington, and notwithstanding the wind was high, he killed forty-five: it was allowed he hit every bird, and that he would have succeeded but for the above circumstance. He had but one gun, the touch-hole of which fairly melted.

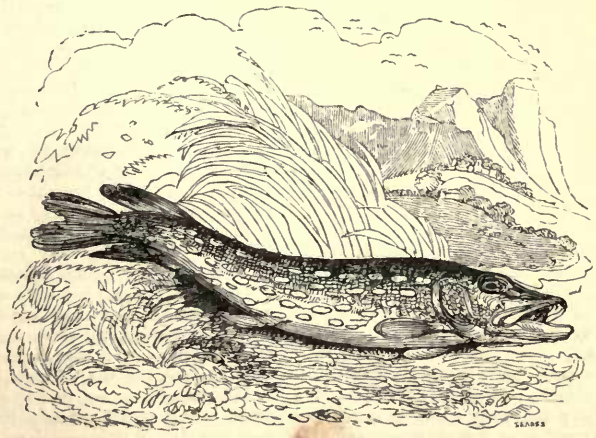
* * *

Four gentlemen of Camberwell undertook, for a wager of five guineas a side, to shoot at twelve pigeons, and great bets were depending, but to the mortification of the persons present, they neither of them brought down a single bird.

Mr. Keene, of Hammersmith, killed twenty pigeons in twenty-one shots, from a trap at the regular twenty-one yards' distance, and in March, 1811, he killed, in a match against Mr. Elliot, the same number, beating his adversary by one.

In Wiltshire, the same year, Captain Hicks shot against the gamekeeper of Mr. Maurice, at fifteen pigeons, turned off at the same distance; each killed the whole, and in shooting off the ties, the former missed his sixth bird, and lost the match, which was for two hundred guineas.—*Moubray—Daniel.*

PIKE, *s.* A long lance used by the foot soldiers to keep off the horse, to which bayonets have succeeded; a fork used in husbandry; among turners, two iron springs between which anything to be turned is fastened; a large fish of prey.



The pike, termed for its voracity the fresh-water shark, is found in most of the larger lakes and rivers of Great Britain. It grows to an immense size—is easily produced as a pond fish—and, being a bold determined biter, affords excellent sport to the lovers of the art.

It is taken with natural and artificial baits, as frogs, mice, minnows or any kind of fry; and when the weather is favourable very little skill is requisite to obtain abundant sport in a well-stocked water. The best mode of pike-fishing is trolling. *Vide* Trolling.

The pike's voraciousness is well known: what is here mentioned of it is singular. In 1810, a hook baited with a roach, was set in the manor-pond, at Toddington, Bedfordshire; the next morning a large pike was caught, which with difficulty was got out. It appeared that a pike of three and a half pounds weight was first caught, which was afterwards swallowed by another, weighing thirteen pounds and a half, and both were taken.

It has been before remarked, that pike are frequently shot, when floating near the surface of the water. Other sorts of fish are often so destroyed. In June, 1808, Mr. Byrne, the Earl of Lonsdale's gamekeeper, shot in the river Eden, at Beaumont, near Carlisle, the extraordinary number of eighty-six fish, at two shots; the smallest fish was seven inches in length.

The smaller lakes, which are so profusely scattered over the surface of this county, vary in the species of fish which they respectively produce, as much as they do in their own natural size and character. Some of them afford trouts, others pike only, and many are stocked with both. That this union cannot long subsist, I should be inclined to infer from one remarkable circumstance, and it is a convincing proof of the rapid destruction which the introduction of pike into a trout lake will occasion. Within a short distance of Castlebar there is a small bog-lake, called Derreens; ten years ago it was celebrated for its numerous and well-sized trouts. Accidentally pike effected a passage into the lough from the Minola river, and now the trouts are extinct or, at least, none of them are caught or seen. Previous to the intrusion of the pikes, half-a-dozen trouts would be killed in an evening in Derreens, whose collective weight often amounted to twenty pounds.

* * *

Indeed the appetite of one of my pike was almost insatiable. One morning I threw to him, one after the other, five roach, each about four inches in length. He swallowed four of them, and kept the fifth in his mouth for about a quarter of an hour, when it also disappeared.

Fish appear, also, to be capable of entertaining affection for each other. I once caught a female pike during the spawning season, and nothing could drive the male away from the spot at which the female disappeared, whom he had followed to the very edge of the water. A person who had kept two small fish together in a glass, gave one of them away; the other refused to eat, and showed evident symptoms of uneasiness till his companion was restored to him.

The boldness of a pike is very extraordinary. I have seen one follow a bait within a foot of the spot where I have been standing; and the head keeper of Richmond Park assured me that he was once washing his hand at the side of a boat in the great pond in that Park, when a pike made a dart at it, and he had but just time to withdraw it.

A gentleman (Major Payne) now residing at Weybridge, in Surrey, informed me, that, walking one day by the side of the river Wey, near that town, he saw a large pike in a shallow creek. He immediately pulled off his coat, tucked up his shirt-sleeves, and went into the water to intercept the return of the fish to the river, and to endeavour to throw it upon the bank by getting his hands under it. During this attempt, the pike, finding he could not make his escape, seized one of the arms of the gentleman, and lacerated it so much that the wound is still very visible.

The digestion of the pike is so rapid, that, in a few hours, not a single bone of a roach which it has swallowed can be discovered. This may account for the fact of a pike, who has gorged himself to the full, holding a small fish in his mouth whilst the digestion of his previously taken prey has been going on, and swallowing it as soon as that process had been effected.

The rapid growth of some fish is very extraordinary. I saw three pikes taken out of a pond in Staffordshire belonging to the present Sir Jervoise Clark Jervoise, two of which weighed thirty-six pounds each, and the other thirty-five pounds. The pond was fished every seven years, and, supposing that store pike of six or seven pounds weight were left in it, the growth of the pike in question must have been at the rate of at least four pounds a-year.

* * *

About seventeen years since, when visiting the late Marquis of Clanricarde at Portumna Castle, two gentlemen brought to the marquis an immense pike, which they had just caught in the river Shannon, on the banks of which they had been taking their evening walk. Attracted by a noise and splashing of the water, they discovered in a little creek a number of perch driven on shore, and a fish which, in pursuit of them, had so entangled himself with the ground, as to have a great part of its body exposed, and out of water. They attacked him with an oar, that by accident lay on the bank, and killed him. Never having seen any fish of this species so large, they judged it worth the observation of the marquis, who, equally surprised at its magnitude, had it weighed, and to our astonishment it exceeded the balance at ninety-two pounds;

its length was such, that when carried across the oar by the two gentlemen, who were neither of them short, the head and tail touched the ground. * * *

Now that I am speaking of pike I may observe that eagles, which were rather numerous hereabout, were not unfrequently seen to pounce on those fish whilst basking near the surface. It was said, however, that when the pike was very large, he had been known to carry the eagle under water; when, from the latter being unable to disengage his talons, he was of course drowned. Indeed, Dr. Mellerborg, a medical gentleman attached to the Uddeholm establishment when I first visited Wermeland, vouched for this being the fact, he himself having once seen an enormous pike, with an eagle fastened to his back, lying dead on a piece of ground which had been overflown, but from which the water had then retreated.

Captain Eurenius also informed me, that he himself was once an eye-witness to a similar occurrence. This was on the Götha river, and at no great distance from Wenersborg. In this instance, when the eagle first seized the pike, he was enabled to lift him a short distance into the air; but the weight of the fish, together with its struggles, soon carried them back again to the water, under which for a while they both disappeared: presently, however, the eagle again came to the surface, uttering at the same time the most piercing cries, and making apparently every endeavour to extricate his talons, but all was in vain, and, after a deal of struggling, he was finally carried under the water.

Captain Eurenius said, moreover, that pike were occasionally taken alive with only the legs and talons of the eagle attached to their backs, the body of the bird having previously rotted off. This, if true, is a curious circumstance; for one would naturally have supposed, that with such a knapsack the fish would have been unable to procure his food, and that he consequently must soon have perished.

In corroboration of these stories I may mention, that when I was in the Orkney Islands a few years ago, I was told of the eagle striking turbot and other fish at sea, when similar results to what I have just stated occasionally took place. At that time, however, I confess, I was a little incredulous on the subject.

* * *

There are no waters in Great Britain, with the exception of the river Shannon, where larger pikes are caught than those taken in Loughs Mask and Corrib. It would appear, that in these lakes the fish are commensurate to the waters they inhabit. It is no unusual event for pikes of thirty pounds weight to be sent to the landlords by their tenants; and fish of even fifty pounds have not unfrequently been caught with nets and night-lines. The trouts in those loughs are also immensely large. From five to fifteen pounds is no unusual size, and some have been found that reached the enormous weight of thirty. The perch tribe appear the smallest in the scale of relative proportion. These seldom exceed a herring size, but they too have exceptions, and perch of three or four pounds weight have been sometimes seen. Within fifty years this latter fish has increased prodigiously, and in the lakes and rivers where they abound trouts have been found to diminish in an equal ratio. If any doubt remained touching the fecundity of the perch, some of the Mayo waters would prove it satisfactorily. Half a century since, I have been assured that pike and perch were almost unknown in the rivers of Belcarra and Minola, and the chain of lakes with which they communicate, and that these waters were then second to none for trout-fishing. Within ten years, my cousin tells me that he often angled in them, and that he frequently killed from three to six dozen of beautiful middle-sized red trouts. Now, fly-fishing is seldom practised there. The trout is nearly extinct, and quantities of pike and perch infest every pool and stream. The simplest methods of taking fish will be here found successful, and the lakes of Westmeath will soon be rivalled by the loughs of Mayo. — *Jesse — Lloyd — Daniel — Wild Sports.*

Pilcher or Pilchard, *s.* A fish like a herring.

The pilchard has a general likeness to the herring, but, when comparatively described, is essentially different. The body of the pilchard is less compressed, being thicker and rounder; the back is more elevated, the belly less sharp, the nose turns up, and, as well as the under jaw, is shorter, the dorsal fin is placed exactly in the centre of gravity, so that when taken up by it, the body preserves an equilibrium; that of the herring dips at the head. The scales of the pilchard adhere closely, whereas those of the herring very easily drop off; besides the pilchard is fatter, or more full of oil.

About the middle of July, the pilchards in vast shoals approach the Cornish coasts; the beginning of winter they disappear, a few returning after Christmas. Their winter retreat, and their motives for migrating, are the same with the herring. During summer, they affect a warmer latitude, no quantities being found on any of our coasts, except those

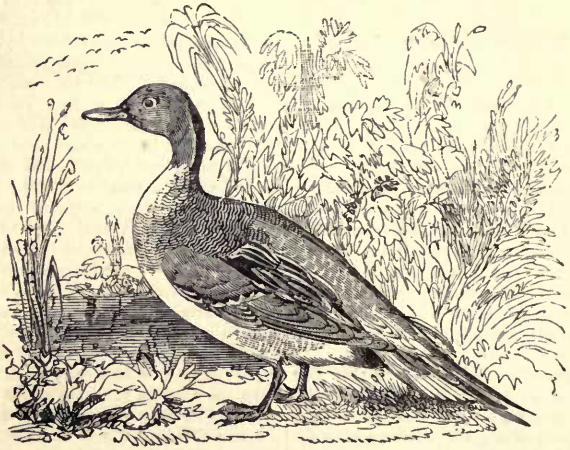
of Cornwall; namely, from Fowey harbour to the Scilly Isles, between which places, for some weeks, the shoals keep shifting.

The appearance of the pilchard is known by the birds and larger fishes attendant upon them, and persons called Huers are placed on eminences, to point to the boats stationed off the land the course of the fish, by whose directions sometimes a bay of several miles' extent is enclosed with their nets, called seines. By the first of James I. c. 23, fishermen are empowered to go on the grounds of others to hue, without being liable to action for trespass, which before occasioned frequent law-suits. The numbers that are taken at one shooting of the nets is astonishing. Upon the fifth of October, 1767, there were at one time inclosed in St. Ive's Bay, 7,000 hogsheads, each cask containing 35,000 fish, in all 245,000,000.

PINT, *s.* Half a quart; in medicine, twelve ounces; a liquid measure.

PINTADO, *s.* Guinea fowls: before rain, the pintados, called comebacks, squall more than usual, as do peacocks.—*Foster.*

PINTAIL DUCK, LEA PHEASANT, CRACKER, WINTER DUCK (*Anas acuta*, LINN.; *Le Canard à longue Queue*, BUFF.), *s.*



This handsome-looking bird is twenty eight inches in length, and thirty eight in breadth, and weighs about twenty four ounces. The bill is rather long, black in the middle, and blue on the edges; the irides reddish; the head and throat are of a rusty brown, mottled with small dark spots, and tinged behind the ears with purple; the nape and upper part of the neck are dusky, margined by a narrow white line, which runs down on each side, and falling into a broader stripe of the same colour, extends itself on the fore part as far as the breast; the rest of the neck, the breast, and the upper part of the back, are elegantly pencilled with black and white waved lines; the lower back and sides of the body are undulated in the same manner, but with lines more freckled, less distinct, and paler; the scapulars are long and pointed, each feather black down the middle with white edges; the coverts of the wings are ash-brown, tipped with dull orange; below these the wing is obliquely crossed by the beauty spot of glossy bronze purple green, with a lower border of black and white; this spangle is formed by the outer webs and tips of the middle quills; the rest of the quills are dusky. All the tail feathers are of a brown ash-colour, with pale edges, except the two middle ones, which are black, slightly glossed with green, considerably longer than the others, and end in a point; the belly and sides of the vent are white; under tail-coverts black; legs and feet small, and of a lead colour.

The female is less than the male, and her plumage is of a much plainer cast, all the upper parts being brown, with each feather margined more or less with white, inclining to red or yellow; the greater coverts and secondary quills are tipped with cream-colour and

white which form a bar across the wings. The fore-part of the neck, the breast, and the belly to the vent, are of a dull white, obscurely spotted with brown. The tail is long and pointed, but the two middle feathers do not extend themselves beyond the rest, like those of the male.

These birds do not visit the temperate and warm climates in great numbers, except in very severe winters, the great bulk of them dropping short, and remaining during that season in various parts of the Russian dominions, Sweden, Norway, &c., and also in the same latitudes in both Asia and America. They are seldom numerous in England, but flocks of them are sometimes abundantly spread along the isles and shores of Scotland and Ireland, and on the interior lakes of those countries, as well as those of the continent as far south as Italy, and in America as far south as New York. They are esteemed excellent eating.

The pintail duck is of a taller or more lengthened shape than any of the species, and, in the opinion of the Count de Buffon, seems to form the link between the duck and the gargancy.—*Latham—Bewick.*

Pip, *s.* A defluxion with which fowls are troubled; a horny pellicle that grows on the tip of their tongues; a spot on the cards.

Pipe, *s.* Any long hollow body, a tube; a tube of clay through which the fume of tobacco is drawn into the mouth; an instrument of wind music; the organs of voice and respiration, as the windpipe; the key of the voice; a liquid measure containing two hogsheads.

Pipe, *v.* To play on the pipe; to have a shrill sound as birds have.

Pipkin, *s.* A small earthen boiler.

Piquet, *s.* A game at cards.

Piquet is played by two persons, with thirty-two cards: the ace, king, queen, knave, ten, nine, eight, and seven of each suit. The ace is the superior, and equal to eleven points; the king ranks above the queen, and the queen above the knave, &c. The three court cards are each equal to ten points; the ten, ten; the nine, nine; and so of the rest, each counting for as many points as it has pips.

The game consists of 101 points. The players begin with shuffling the cards; then they are to cut; he who cuts the lowest deals, but the great advantage is in being elder hand. The dealer then shuffles the cards again, and presents them to his adversary, who may also shuffle, but the dealer must have the last shuffle. If the adversary should scatter the cards, or cut but one off, or leave but one at the bottom, the dealer may mix and shuffle them again. The dealer is to give twelve a piece, by two at a time, and the eight cards which remain must be placed upon the table, and are called the talon or stock.

In this game there are three superior chances, viz. the repique, the pique, and the capot, all which may be made in one deal, as thus: suppose one of the players to have four tierce-majors, his point to be good, and he is eldest hand: he begins by counting three for his point, then twelve for his four tierce-majors, next fourteen for the four aces, fourteen for the four kings, and fourteen for the four queens, then sixty for the repique, thirteen he gains in playing the cards; and he has forty for the capot, which make together one hundred and seventy: this stroke, perhaps, has never happened; but it is just if it ever should.

To pique the adversary, you must be elder hand; for if youngest, your adversary counts one for the first card he plays, and then you having counted only twenty-nine in hand, even if you take the first trick, it will not authorise you to count sixty, but only thirty.

The carte blanche precedes every thing, then follows the point, then the huitièmes, the septièmes, the sixièmes, the quints, the quarts, the tierces, the four aces, kings, queens, knaves, or tens; then the three aces, kings, queens, knaves, or tens; then the points gained in playing the cards; and the last is the ten for winning the cards, or the forty for the capot. After sorting the cards, the first thing to be considered is, whether you have a carte blanche, if so, let your adversary discard, and when he is going to take in lay your twelve cards on the table, counting them one after another.

The players having examined their hands, the elder hand may discard five cards or fewer as he may deem for his advantage, and, laying them aside, he takes as many from the talon or heap; the youngest hand can lay out three only, unless any of the five allotted to his adversary be left, which he may take or not, as he pleases.

In discarding, the first intention in skilful players is, to gain the cards, and to have the point, which most commonly engages them to keep in that suit, of which they have the

most cards, or that which is their strongest; for it is convenient to prefer, sometimes, forty-one in one suit to forty-four in another, in which a quint is not made; sometimes, even having a quint, it is more advantageous to hold the forty-one, where, if one card only be taken in, it may make it a quint-major, and gain the point, or the cards, which could not have been done by holding the forty-four, at least, without an extraordinary take-in. Also endeavour, in laying out, to get a quatorze; that is, four aces, kings, queens, knaves, or tens, each of which counts for fourteen, and is therefore called a quatorze. The fourteen aces in your hand hinder the counting fourteen kings in the adversary's, &c., and by this superiority you may count a lesser quatorze, as of tens, notwithstanding your adversary may have fourteen kings, &c., because the stronger (viz. the aces) annuls the weaker: and also, in the want of a lesser quatorze you may count three aces, three kings, three queens, three knaves, or three tens. Three aces are better than three kings; and he who has them may by virtue thereof count his three tens, although the adversary may have three kings; in favour of a quatorze you count not only any lesser quatorze, but also all the threes which you have, except of nines, eights, and sevens. The same is to be observed in regard to the huitièmes, septièmes, sixièmes, quints, quarts, and tierces, to which the player must have regard in his discarding, so that what he takes in may make them for him.

The point being selected, the eldest hand declares what it is, and asks if it be good: if his adversary have not so many, he answers it is good; if he have just as many, he answers it is equal; and if he have more, he answers it is not good; for whoever has the point, whether eldest or youngest, counts it first; but if the points be equal, neither can count: it is the same when the players have equal tierces, quarts, quints, &c., and whoever should hold several other sequences, either of the same goodness or lesser cannot count them.

After the elder hand has counted the point, he should examine if he have not tierce, quart, quint, &c., and then if any quatorze, or three aces, kings, &c., that he may reckon them, should his adversary not hinder him by having better.

The points, the tierces, quarts, quints, &c., are to be shown on the table, that their value may be seen and reckoned; but you are not obliged to show quatorzes, or three aces, kings, queens, knaves, or tens.

After each has examined his game, and the elder, by the questions asked, seen every thing that is good in his hand, he begins to reckon. The carte blanche is first reckoned, then the point, next the sequences, and lastly, the quatorzes, as well as threes of aces, kings, &c., after which he begins to play his cards, counting one for each, except it be a nine or an inferior card.

After the elder hand has led his first card, the younger shows his point, if it be good, also the sequences, quatorzes, or threes of aces, kings, &c., and having reckoned them all together, he takes the first trick if he can with the same suit, and counts one for it; if he cannot, the other turns the trick and continues; and when the younger hand can take the trick, he may lead what suit he pleases.

A good player is principally known from an indifferent one by his manner; and it is not possible to play well without knowing the strength of the game; that is to say, by your own hand you should know what your adversary may hold, and what he must have discarded, and great notice should be taken of what he has shown or reckoned. There are no trumps at piquet, but the highest card of the suit, if played, takes the trick.

Should the elder hand have the misfortune to hold neither point, sequence, quatorze, or threes which are good, he must begin to count by playing that card which he judges most proper, and continue until his adversary has played a superior, to gain the lead in his turn. This method must be continued till all the twelve cards are played, and he who takes the last trick counts two. Then each player counts how many tricks he has taken, and he who has the most reckons the cards; but should they be equal, neither side can count any thing for the cards.

As soon as a deal is finished, each player should mark how many points he has made, and so proceed until the game be completed; and after every deal the cards must be shuffled and cut for the next; each player taking his turn, unless the game be concluded in one deal.

When you begin another game, the cards must be cut afresh for the deal, unless it be agreed upon at first, that the deal shall go on.

TERMS USED AT PIQUET.

Capot is when either of the players makes every trick, for which he scores forty.

Cards signify the majority of tricks, which reckon for ten points.

Carte Blanche means a hand without a court card in the twelve dealt, which counts for ten, and takes place of every thing else.

Huitième, eight successive cards of the same suit, counts eighteen points.

Pique, is when the elder hand has reckoned thirty in hand, and plays before the adversary has gained one; in which case, instead of thirty it is called sixty, and he adds thereto as many points as are obtained above thirty.

Point, the greatest number on the cards of the same suit in hand, after having taken

in, reckoned by their pips, scores for as many points as cards.

Quart, four cards in sequence of the same suit counts four points: there are five kinds of quarts, the first called quart-major, consisting of ace, king, queen, and knave; the second quart, of king, queen, knave, and ten; the third quart, of queen, knave, ten, and nine; the fourth quart, of knave, ten, nine, and eight; the fifth, a basse-quart or quart-minor of ten, nine, eight, and seven.

Quatorze, the four aces, kings, queens, knaves, or tens, scores fourteen points.

Quint means five cards of the same suit in sequence, and reckons fifteen points: there are four sorts of quints; a quint-major of ace, king, queen, knave, and ten, down to knave, ten, nine, eight, and seven, styled a quint-minor.

Repique signifies when one of the players counts thirty or more in hand, before the adversary obtains one, when it is called ninety, reckoning besides as many points above ninety as were gained above thirty in *pique*.

Sixième, or six cards of the same suit in sequence, reckons for sixteen points; there are three sorts of sixièmes, viz. sixième-major from the ace, sixième from the king, and sixième-minor from the queen.

Septième, or seven of the same suit in sequence, counts for seventeen points; there are two septièmes, one from the ace, the other from the king.

Threes of aces, &c., down to tens, reckon three points.

Talon or *Stock* means the eight remaining cards after twelve are dealt to each player.

Tierce or sequence of three, reckons for three: there are six kinds of tierces, tierce-major, of ace, king, queen; down to nine, eight, seven, styled tierce-minor.—*Hoyle.*

Piscation, *s.* The act or practice of fishing.

Piscatory, *a.* Relating to fishes.

Piscivorous, *a.* Fish-eating, living on fish.

Pismire, *s.* An ant, an emmet.

Pistol, *s.* A small sort of firearms.

Pistol, *v.* To shoot with a pistol.

We were awakened early the next morning by some of our party, who had come to Versailles for the express purpose of witnessing the great shooting match which was to take place at six o'clock in the gardens of the manufactory. Accordingly we repaired to the appointed spot, attended by M. Boute, one of the principal overseers. I naturally imagined, that the pistols to be tried on this occasion were those of the manufactory, but I found this was not the case, the locks only having been constructed there.

The first match being read, whereby Mr. Tripper had engaged that an Italian gentleman named Dance, would hit a cork of an ordinary size, at sixteen yards' distance, four times out of five, for two hundred guineas, Mr. Dance begged leave to state, that his friend must have laboured under an error, as he never pretended to hit more than once in five shots, and consequently declined any other. The forfeit money was therefore paid to me as judge, and an elegant dinner agreed on for a subsequent day.

The second bet was between Mr. Tripper, and Mr. H —— when the former wagered twenty guineas that Mr. H —— could not hit a cork at the same distance once in ten shots. At the first trial Mr. H —— very nearly struck the cork, and bets were keenly laid on his side, but notwithstanding he made good mark he proved unsuccessful.

Mr. Dance was then matched to hit a card-wafer, twice in four shots, at sixteen yards for thirty guineas. His aim proved accurate three times, and he consequently won the wager. Mr. Boute came forward and hit the wafer four times successively, but missed in two other trials.—*Thornton.*

Pit, *s.* A hole in the ground; abyss; the area on which cocks fight; the middle part of the theatre; any hollow of the body, as the pit of the stomach, the arm-pit; a dint made by the finger.

Pitch, *s.* A black and impure resinous substance, used by farriers in making charges, obtained by boiling or distilling tar to the desired consistence.

Pitfall, *s.* A pit dug and covered, into which animals fall unexpectedly.

Plaice, *s.* A flat fish. Although properly a sea fish, plaice will not only live in fresh water, but thrive apace. They will take any sort of small worm, and to the sand-worm, called in Ireland the lug, they appear particularly partial.

Plain, *s.* Level ground, open flat.

Plash, *s.* A small lake or puddle of water; branch partly cut off and bound to other branches.

Plaster, *s.* Substance made of water and some absorbent matter, such as chalk or lime well pulverised, with which walls are overlaid; a glutinous or adhesive salve.

Plate, *s.* A piece of metal beat out into breadth; wrought silver; a small shallow vessel of metal or porcelain, on which meat is eaten; the prize run for by horses.

Plates, *s.* Light horse shoes. *Vide* Racing.

Platina, *s.* A species of metal, much used in bushing touch-holes, and generally preferred to gold for that purpose.

Play, *s.* Amusement, sport; game, practice of gaming; contest at a game; practice in any contest.

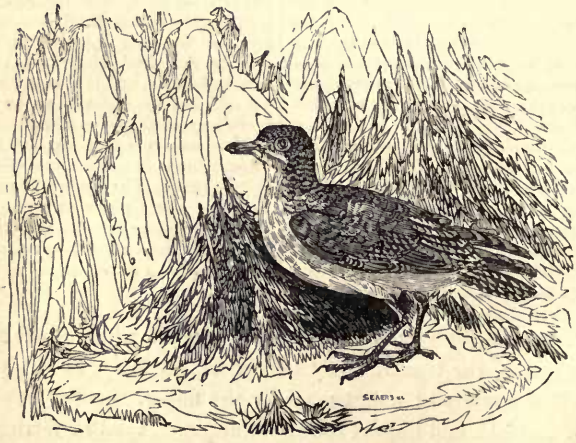
Pledget, *s.* A small mass of lint.

Plethora, *s.* The state in which the vessels are fuller of humours than is agreeable to a natural state of health.

Pleurisy, *s.* An inflammation of the pleura.

Pliers, *s.* An instrument by which anything is laid hold of to bend it.

Plover, *s.* A lapwing.



This genus is distinguished by a large full eye; the bill is straight, short, and rather swollen towards the tip; the head is large; the legs are naked above the knee; and most of the species are without the hind toe.

Although the plover has generally been

classed with those birds whose business is wholly among water, we cannot help considering the greater part of them as partaking entirely of the nature of land birds. Many of them breed upon our loftiest mountains, and though they are frequently seen upon the sea coast, feeding with birds of the water kind, yet it must be observed that they are no more water birds than any of our small birds which repair thither for the same purpose. The long legged plover and the sanderling are waders, and belong more immediately to the water birds, to which we refer them; the great plover and the lapwing we consider as entirely connected with birds of the plover kind; the former has usually been classed with the bustard, and the latter with the sandpiper; but they differ very materially from both, and seem to agree in more essential points with this kind. We have therefore given them a place in this part of our work, where, with the rest of the plovers, they may be considered as connecting the two great divisions of land and water birds, to both of which they are in some degree allied.

The Great Plover, Thick-kneed Bustard, Stone Curlew, Norfolk Plover. (*Charadrius œdicnemus*, Linn.; *Le Grand Pluvier*, Buff.)—The length of this bird is about sixteen inches. Its bill is long, yellowish at the base, and black at the tip; its irides and eyelids are pale yellow; above each eye there is a pale streak, and beneath one of the same colour extends to the bill, the throat is white, the head, neck, and all the upper parts of the body are of a pale tawny brown; down the middle of each feather there is a dark streak; the forepart of the neck and the breast are nearly of the same colour, but much paler; the belly, thighs, and vent, are of a pale yellowish white, the quills are black; the tail is short and rounded, and a dark band crosses the middle of each feather; the tips are black, the rest white: the legs are yellow, and naked above the knees, which are very thick as if swollen, hence its name, the claws are black.

This bird is found in great plenty in Norfolk and several of the southern counties, but is nowhere to be met with in the northern parts of our island; it prefers dry and stony places on the sides of sloping banks. It makes no nest: the female lays two or three eggs on the bare ground, sheltered by a stone or in a small hole formed in the sand; they are of a dirty white, marked with spots of a deep reddish colour, mixed with slight streaks. Although this bird has great power of wing, and flies with great strength, it is seldom seen during the day, except it is surprised, when it springs to some distance, and generally escapes before the sportsman comes within gun-shot; it likewise runs on the ground almost as swiftly as a dog; after running some time it stops short, holding its head and body still, and on the least noise it squats close on the ground. In the evening it comes out in quest of food and may then be heard at a great distance: its cry is singular, resembling a hoarse kind of whistle, three or four times repeated, and has been compared to the turning of a rusty handle.

Buffon endeavours to express it by the words *turlui, turlui*, and says it resembles the sound of a third flute, dwelling on three or four tones from a flat to a sharp. Its food consists chiefly of worms. It is said to be good eating when young, the flesh of the old ones is hard, black, and dry. Mr. White mentions them as frequenting the district of Selborne, in Hampshire. He says, that the young run immediately from the nest almost as soon as they are excluded, like partridges; that the dam leads them to some stony field where they bask, skulking among the stones, which they resemble so nearly in colour as not easily to be discovered.

Birds of this kind are migratory; they arrive in April, live with us all the spring and summer, and at the beginning of autumn prepare to take leave, by getting together in flocks: it is supposed that they retire to Spain, and frequent the sheep-walks with which that country abounds.

The Golden Plover, Yellow Plover. (*Charadrius pluvialis*, Linn.; *Le Pluvier doré*, Buff.)—The size of the turtle; bill dusky; eyes dark; all the upper parts of the plumage are marked with bright yellow spots upon a dark brown ground; the fore part of the neck and breast are the same, but much paler; the belly is almost white; the quills are dusky; the tail is marked with dusky and yellow bars; the legs are black. Birds of this species vary very much from each other; in some which we have had the breast was marked with black and white; in others it was almost black; but whether this difference arose from age or sex we are at a loss to determine.

The golden plover is common in this country and all the northern parts of Europe; it is very numerous in various parts of America, from Hudson's Bay as far as Carolina, migrating from one place to another, according to the seasons. It breeds on high and heathy mountains; the female lays four eggs, of a pale olive colour, variegated with blackish spots. They fly in small flocks, and make a shrill whistling noise, by an imitation of which they are sometimes enticed within gun shot.

The male and female do not differ from each other. In young birds the yellow spots are not very distinguishable, as the plumage inclines more to grey.

The Grey Plover. (*Tringa squaturola*, Linn.; *Le Vanneau Pluvier*, Buff.)—The

length of this bird is about twelve inches; its bill is black; the head, back, and wing coverts, are of a dusky brown, edged with greenish ash-colour, and some with white; the cheeks and throat are white, marked with oblong dusky spots; the belly, sides, and rump, are white: the sides are marked with a few dusky spots; the outer webs of the quills are black; the lower parts of the inner webs of the first four are white; the tail is marked with alternate bars of black and white; the legs are of a dull green; the hind toe is small. In the Planches Enluminées this bird is represented with eyes of an orange colour; there is likewise a dusky line extending from the bill underneath each eye, and a white one above it.

We have placed this bird with the plovers, as agreeing with them in every other respect but that of having a very small hind toe; but this is so slight a difference as not to render it necessary to exclude it from a place in the plover family, to which it evidently belongs. The grey plover is not very common in Britain; it appears sometimes in small flocks on the sea coasts. It is somewhat larger than the golden plover. Its flesh is said to be very delicate.

Long-legged Plover, Long-shanks, or *Long-leg.* (*Charadrius himantopus,* Linn. *L'Echasse,* Buff.)—Its slender black bill is two inches and a half long, from the tip of which to the end of the tail it measures only about thirteen inches, but to the toes a foot and a half; the wings are long, measuring from tip to tip twenty-nine inches; irides red; the crown of the head, back, and wings, a glossy black; tail light grey, except the two outside feathers, which are white, as are all the other parts of its plumage, except a few dusky spots on the back of the neck. Its long, weak, and disproportionate legs are of a blood red, and measure from the foot to the upper naked part of the thigh about eight inches; the toes are short, and the outer and middle ones are connected by a membrane at the base.

Ornithologists mention only a few instances of this singular looking species having been met with in Great Britain, but it is common in other countries.

Latham says it is common in Egypt, being found there in the marshes in October; its food is said to consist principally of flies. It is likewise plentiful about the salt lakes, and is often seen on the shores of the Caspian Sea, as well as by the rivers which empty themselves into it, and in the southern deserts of Independent Tartary. We have also seen it on Chinese paintings, and it is known at Madras in the East Indies. It is also often met with in the warmer parts of America; is sometimes seen as far north as Connecticut, and also in Jamaica.

* * *

Plover Shooting.—There is, in shooting plovers, a common remark made by sportsmen that the second is always the more productive barrel. The rapidity with which they vary their position when on the ground, seldom admits of a grand combination for a sitting, or rather a running-shot. But when on the wing, their mode of flight is most favourable for permitting the shot to tell; and it is by no means unusual to bring down a number. When disturbed, they frequently wheel back directly above the fowler, and offer a tempting mark if he should have a barrel in reserve; and even when too high for the shot to take effect, I have often thrown away a random fire; for the plovers, on hearing the report, directly make a sweep downwards on the wing, and I have by this means brought them within range of the second barrel.

* * *

Golden plovers were formerly killed in great plenty by means of a stalking-horse. If you fire at these birds as they fly over you, they will dart down for the moment, and spread in every direction; so that by taking a random shot with your first barrel, you may often bring down the birds to a fair one for your second.—*Bewick.*

Pluck, *v.* To pull with nimbleness or force; to snatch, to pull, to draw; to strip off feathers.

Pluck, *s.* A pull, a draw, a single act of plucking; the heart, liver, and lights of an animal.

Plumage, *s.* Feathers, suit of feathers.

I believe that no attention has been paid to the effects of different kinds of food on the colours of birds. The linnet and redpole, in confinement, lose, after the first moult, their red colour, and it does not return. Is this owing to the want of the peculiar food they would take in the spring, if at liberty, or to their being less exposed to the sunshine? I once saw the English white water-lily blow of a pale rose colour, after a week of unusual heat in July. Birds that change their colours at different seasons, always put on their bright garb in the warm season. I have repeatedly observed, in a splendid nondescript finch

which I possess, that, although it moults partially twice in the year, the colour of the larger feathers on the wings and back changes gradually from yellowish brown to scarlet, and fades again at the approach of winter. In this bird, the change to grey red is very clearly occasioned by the increase of temperature. I have observed, in the spring, that the supervention of cold weather stops it progress. In the Whidah bird, the mutation of dress is rapid, accompanying the moult in June and July. The American blue bird pushes brown feathers in its summer moult, which are very suddenly turned to blue. There is a mystery in these mutations which we do not understand.

* * *

It is not easy to account for the variation we sometimes perceive in the plumage of birds of the same species. I have observed a rook with one white wing, during the last three years, in the rookery in Hampton Court park; and I saw a sparrow nearly white, amongst a flock of those birds, at West Molesey. A linnet was shot and brought to me from the same place, which was beautifully mottled with white and brown. Some years ago I was shown some white blackbirds, in the grounds of a nobleman at Blackheath, which had been bred there; and what showed this was not an accidental circumstance, they produced young of the same colour as themselves.—*White of Selborne—Jesse.*

PLUME, *s.* Feather of birds; feather worn as an ornament; the colour of a hawk's feathers, by which her age and condition are ascertained.

PLUME, *v.* To pick and adjust feathers; to strip off feathers.

PLUMING, *p.* The hawk in the act of tearing feathers from her prey.

PLUMIPEDE, *s.* A fowl that has feathers on the foot.

PLUMMET, *s.* A weight of lead hung to a string, by which depths are sounded, and perpendicularity is discerned. A plummet and line will be very serviceable to the bait fisher, in ascertaining the depth of the water, and enabling him thus to regulate the position of the float.

PLUMP, *a.* Somewhat flat, sleek, full, and smooth.

PLUNGE, *v.* To sink suddenly in water; to dive.

POACH, *v.* To steal game; to carry off game privately in a bag.

POACHER, *s.* One who steals game.

POCHARD, POKER, DUNBIRD, GREAT-HEADED WIGEON, (*Anas Ferina*, LINN.; *Penelope, La Millouin*, BUFF.) *s.*

The pochard is nineteen inches in length, and two feet and a half in breadth, and weighs about one pound thirteen ounces. The bill is of a dark lead-colour, with the tip and sides near the nostrils, black: irides fine deep yellow: the head and neck are of a glossy chestnut, joined to a large space of sooty black, which covers the breast, and is spread over the shoulders: the lower part of the back, rump, tail-coverts, and vent, are also black: the rest of the plumage, both above and below, is wholly covered with prettily freckled, slender, dusky threads, disposed transversely in close-set zig-zag lines, on a pale ground, more or less shaded off with ash, and deepest on the wing-coverts. The primary quills are brown, with dusky tips; the secondaries lead-colour, tinged with brown, and slightly tipped with dull white. The tail consists of twelve short feathers, of a dark-brownish ash, which have also a hoary grey appearance: the legs and toes are lead-colour, shaded and dashed with black. This species is without the beauty-spot on the wings, and has altogether a more plain and half-mourning kind of look than others of this tribe. The specimen from which the above figure was drawn, was shot at Axwell-park, in the county of Durham: the description was taken from one shot in January, near Holy Island. The former differed from the latter in wanting the black on the rump and vent, and in some other slight variations in the shadings of its colours.

The head of the female is of a pale reddish-brown; the breast is of rather a deeper colour; the coverts of the wings plain ash-colour; the back marked like that of the male; the belly ash-coloured.

These birds leave the north on the approach of winter, and migrate southward as far, it is said, as Egypt, in Africa, and Carolina and Louisiana, in America. They arrive in the marshes of France about the end of October, in tolerably numerous flocks; and

considerable numbers of them are caught in the fens of Lincolnshire during the winter season, and sold in the London markets, where they and the female wigeons are indiscriminately called dunbirds, and esteemed excellent eating. It has not yet been discovered whether any of them remain to breed in England.

The pochard is of a plump, round shape, and its walk is heavy, ungraceful, and waddling; but when on the wing they fly with greater rapidity than the mallard, and in flocks of from twenty to forty, commonly in a close compact body, whereby they may be easily distinguished from the triangular-shaped flocks of the wild duck, as well as by the difference of the noise of their wings.

The few attempts which have been made to domesticate this species have failed of success. They do pretty well where they have plenty of water, but it is said that they cannot bear walking about on hard, pebbly ground.—*Bewick.*

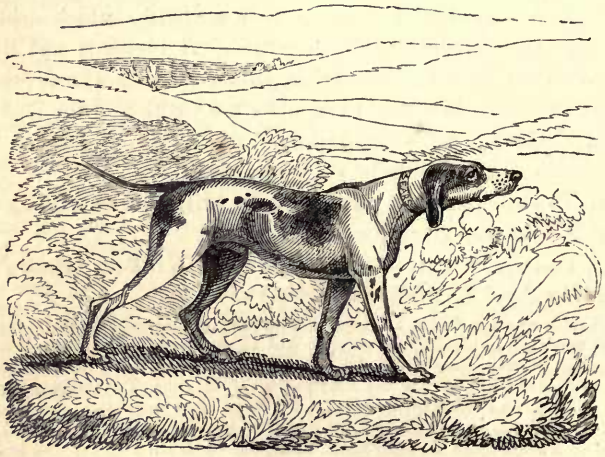
POCK. *s.* A pustule raised by the small pox.

POD, *s.* The capsule of legumes, the case of seeds.

POINT, *s.* The sharp end of any instrument; a string with a tag; headland, promontory.

POINT, *v.* To sharpen, to forge or grind to a point; to indicate, as dogs do to sportsmen; to show.

POINTER, *s.* Anything that points; a dog that points out game to sportsmen.



The Spanish Pointer. (*Canis Avicularis, variety α*, LINN.)—This dog, as his name implies, is a native of the Peninsula, and was introduced into this country at a very early period. Great attention was paid by sportsmen for a long series of years to preserve, in purity, this important breed; but lately it has in a great measure been set aside in field sports, a more improved race having been produced by crossing, usually called the English pointer.

The Spanish pointer is much larger and stronger than the English, and is also more steady. He seems to have an inherent aptness for receiving instruction. Indeed it requires but little tuition to render him fit for the field; as, in most instances, young dogs of this breed will point of their own accord, whilst the more improved kinds require considerable drilling to initiate them, and make them do their work steadily.

The Spanish breed is the most staunch of all dogs, and if they had speed and activity in proportion to their steadiness, they would excel all others which are auxiliary to man in the sports of the field. From their weight, however, they are not so well suited for an extensive range, nor are they so hardy as the

English dog, on which account they are ill adapted for the laborious amusement of grouse-shooting. They are now chiefly used by those who confine their sport to the pheasant and partridge.

The English Pointer (*Canis Avicularis, variety* β.)—This dog is sprung from the Spanish pointer, but is of a much lighter form, and much more rapid in his movements. He was obtained originally by a cross of the latter and the fox-hound, and has since been recrossed with the harrier. The English pointer is of a great variety of sizes, being in this particular bred according to the taste of the sportsman.

This dog possesses a beautiful symmetry of frame, and in this respect is, perhaps, the most elegant of all the canine tribe. His docility and pliability of temper, too, are truly astonishing, and he enjoys, at the same time, the sense of smelling in an exquisite degree.

About sixty years ago, the breed of pointers was nearly white, or mostly variegated with liver-coloured spots, except the celebrated dogs of the then Duke of Kingston, whose black pointers were considered superior to all others in the kingdom, and sold for immense sums after his death. Since that time they have been bred of all sizes and colours, and have at length attained that degree of perfection for which they are now so justly prized all over Europe.

Dogs of the middle size are now generally considered the best by experienced sportsmen; the larger kinds, like the Spanish pointer, are too heavy, and soon tire in warm weather, although they are best adapted for hunting in the high turnips, heath, and broom-fields.

In proportion as the breed of pointers diverges in blood from their Spanish original, the difficulty of training them, and rendering them staunch for the field, increases, as they seem to lose a quality inherent in the latter dog.

Pointers are never considered complete in training, unless they are perfectly staunch to bird, dog, and gun, which implies, first, standing singly to a bird or covey; secondly, to backing or pointing the moment he perceives another dog to stand at game; and, thirdly, not to stir from his own point at the rising of any bird, or the firing of any gun in the field, provided the game is neither sprung nor started at which he himself originally pointed.

The pointer possesses a degree of mildness and pliability of disposition most admirably adapted for receiving instruction, and his mental faculties are extremely acute. He is most susceptible of impressions; serene in his general habits, and unwearied in his attachments. With all these good points, he is well qualified to secure the esteem and confidence of man, whom he is always solicitous to please, and obedient to all that is inculcated upon him. Whenever he is conscious of his own powers and education, he makes it his whole business to serve and amuse his master. At the same time, he will also perform his work to others to whom he may be lent, and is sensible of the duty required of him the moment he enters the field.

Pointers are seldom used in any other kind of shooting than that of grouse, partridge, and snipe; in the two last of which sports their merits are the more conspicuous.

Mr. Daniel informs us, that he once had a pointer that would always go round close to the hedges of a field before he would quarter his ground; the dog being sensible that he most frequently found his game in the course of this circuit, and therefore very naturally took the middle road to discover it.

The Small Pointer (*Canis Avicularis, minor variety*, γ.)—I have just seen an extremely small pointer, in the possession of C. G. Stewart Menteath, Esq. of Closeburn. His length, from the tip of the nose to the point of the tail, is only two feet and half an inch; from the one fore-foot to the other, across the shoulders, two feet; length of the head, six inches; round the chest, one foot three inches. He is an exquisite miniature of the English pointer, being in all respects similar to him. His colour is white, with dark liver-coloured patches on each side of the head, extending half down the neck; the ears, with some patches on the back, are also of the same colour; and numerous small dark brown spots appear over his whole body and legs. This beautiful little animal has an exquisite sense of smell; and it is said that some of the same variety, possessed by the Earl of Lauderdale, have been broken in, and make excellent pointers; although, from their minute size, it cannot be expected that they will be able to do much work. When intent on any object, the dog assumes the same attitude as other pointers, holding up one of his feet.

I have not been able to ascertain the native county of this variety, although I have been informed it is common in the south of Germany.

Sir James Colquhoun has a dog of the same breed, which is even smaller than that belonging to Mr. Menteath.

The Russian Pointer (*Canis Avicularis, variety* δ.)—This variety seems only to be a descendant of the Spanish pointer, which he strongly resembles in shape, with rough wiry hair all over his body, probably arising from the coldness of the climate, as nature seems to provide all the dogs of boreal regions with a covering fitted to resist the inclemency of the sky. Even his legs are invested with hair, which is generally of a uniform black

colour, or of a dark umber brown. There is one peculiarity about him, which is, that his nose is so deeply cleft that it appears to be split in two; on which account he is termed, in Russia, the double-nosed pointer. His scent is said to be superior to that of the smooth dogs. His cleft nose is found to be inconvenient when he is beating in cover, as the face is apt to be torn where the brush-wood is thick.

Russian sportsmen generally feed their pointers on oatmeal boiled, and they are kept about their houses.

Colour of Pointers.—Respecting the colour of pointers (as before observed), a great deal depends entirely on fancy, but that most esteemed is the liver and white, although there are as good dogs of every other colour, indeed there is hardly a colour but some reason may be assigned for its being either good or bad. A white dog is to be preferred on two accounts; the first is, being all white, he is void of any thing phlegmatic in his constitution, which does not hinder him from retaining the lesson he has been taught, and prevent his being obedient; besides, he has always a good nose: secondly, in grouse shooting, he can be discerned at any distance, whereas a brown one cannot. A white pointer, if good, is a treasure to a keen sportsman. Pointers of lemon, or setters of a red or chestnut colour, are always the most difficult to be brought to obedience, by reason of the bilious humour which prevails in them, and which causes this irregularity. The white pointer is full of stratagems and cunning, and is not so easily tired as dogs of the lemon colour, which are very giddy and impatient, as choler is the most predominant humour in them it in some measure accounts for their being so; they are very uneasy under correction, and are certainly more subject to diseases than any other dogs. Pointers of a brown colour are generally good ones; but one great objection to this colour is, they are difficult to be seen on a mountain, and are sometimes lost, which gives the sportsman a vast deal of trouble before he can discover them; but let any sportsman be asked, if he has not remarked that a brown-coloured dog will bring him closer to game than any other, by reason that they are not so easily perceived by the birds or game, as one of a white or any other colour. The compiler, from many years' experience, is confident a sportsman will get more shots with a brown dog than one of any other colour, and has found him very useful when birds become shy, and the season is far advanced.—*Thornhill.*

Poison, *s.* That which destroys or injures life by a small quantity, and by means not obvious to the senses, venom.

Corrosive sublimate, or oxymuriate of quicksilver, is a most deadly and unmanageable poison to dogs, in doses as small even as five or six grains. Its effects are observed soon after it is taken, by the distress of the animal, by his frequent retchings, insatiable thirst, panting, and anxiety for a cool situation. The mouth becomes swollen; if the dose has been large, it appears ulcerated also, and emits a very fœtid odour, which circumstance forms a very strong characteristic, both with regard to the animal's having been poisoned, and also to the article employed for the purpose. As the symptoms advance the retchings are tinged with blood; the stools become liquid and bloody also; the heart beats faintly, but with rapidity; the extremities become cold; violent tremblings, paralysis, or convulsions follow, and death relieves the sufferer. On examination of the body afterwards, the whole alimentary canal, beginning at the mouth and proceeding backwards, exhibits marks of the corrosive nature of the matter taken. The stomach, on being opened, will appear covered with highly inflamed patches, and the villous folds of its inner and rugose surface will present gangrenous and ulcerated spots, and a ready separation of the mucous from the muscular coat, with blood often suffused between them; which circumstances only take place when a most acrid poison has been swallowed. The intestines also show appearances of great inflammation, particularly of their inner surface, which will be found sprinkled with gangrenous specks, and, moreover, frequently filled with a thick bloody mucus. Such are the usual morbid appearances; but satisfactorily to detect the presence of a poison, and the immediate nature of it, some of the liquid contents of the stomach and bowels, both before and after death, should be saved, and undergo a rigid chemical analysis. In general cases the addition of potash to some of these liquid contents will occasion a light yellow precipitate when corrosive sublimate has been the poisonous agent; but a practical chemist will employ many other tests.

The medical treatment to be pursued in these cases consists in both endeavouring to envelope and to neutralise the acrid matter: the former may be attempted by means of a glairy fluid, for which purpose the whites of eggs have proved the most effectual remedies, beaten into a liquid, given in large quantities, and repeated as often as they have been ejected; when these are not immediatel yat hand, milk may be substituted. Mild clysters

should also be thrown up. When the stomach is somewhat appeased, give an opiate and castor oil. Large doses of soap, dissolved in water, have been recommended as a counter poison to corrosive minerals, or their preparations, and, in the absence of eggs, should be tried.

Arsenic.—This powerful oxide is often given to dogs, and not unfrequently they find it for themselves in a state of mixture with other matters placed to poison rats. The effects produced by it resemble those occasioned by corrosive sublimate, except that, although they prove equally fatal, they are not apparently so intense. The mouth, likewise, is not usually affected, in an equal degree, by this poison as by the other. Dissection, also, detects similar morbid appearances to those above detailed; but, unless a very large dose has been taken, there is not such complete lesion of the coats of the stomach and intestines, but the gangrenous spots and the excess of inflammation are fully sufficient to detect the disorganising action of a mineral poison. Instead of subjecting the liquid contents of the stomach and bowels to the action of potash, as directed when corrosive sublimate is looked for, it is usual to detect arsenic by applying the blue ammoniacal sulphate of copper, which will produce a lively green if arsenic is present. A red hot iron will also occasion these contents to give out a garlic-like smell under similar circumstances.

The treatment proper, in cases of arsenical poisoning, is to give sugar dissolved in milk, in considerable quantities, until it may be supposed that all the poison is evacuated from the stomach, when a similar treatment is to be pursued to that before recommended.

* * *

In speaking of poisons White makes the following curious remark.—I once gave two drachms of stavesacre to a glandered horse; he died in great pain the following night. It is probable that more horses have been killed by aloes, than by any other vegetable preparation. That is to say, by strong physic, or by neglecting the horse during its operation. The best antidote in this case, is gruel made of arrow-root or fine wheat flour. The animal poisons are the stings of venomous reptiles, for which stimulating embrocations seem to be better remedies than fomentations. The matter which flows from the nose of a glandered horse is a strong poison, whether applied to a recent scratch in the skin, or swallowed with food or water. The saliva of a mad dog is a dreadful poison to man, and to all animals. —*Blaine—White.*

Poison, *v.* To infect with poison; to injure, or kill by poison given; to taint.

Poisonous, *a.* Venomous, having the qualities of poison.

Pole, *s.* A long staff; a tall piece of timber erected; a measure of length containing five yards and a half; an instrument of measuring.

Poleaxe, *s.* An axe fixed to a long pole.

Polecat, *s.* The fitchew; it is of the weasel tribe, and emits a most fetid smell.

This animal is known by various names or local appellations. In some parts of the country it is called a fitchet, in others a foumart, in others again a fillemark. The polecat is larger than the ferret, which, however, it very much resembles in appearance and disposition. But, according to the accounts which have been given us by naturalists, there are, it seems, internal differences which distinctly mark these two animals: the polecat has but fourteen ribs; whereas the ferret has fifteen; and it also wants one of the breast bones which is found in the ferret. The ferret is more slender and elongated than the polecat, and has also a more pointed or sharper snout. It is, for the most part, of a deep chocolate colour; it is white about the mouth; the ears are short, rounded, and tipped with white; a little beyond the corners of the mouth a stripe commences, which runs backward, partly white and partly yellow. Its hair is of two sorts, the long and the furry, and the two kinds are of different colours: the longer is black, and the shorter a dull or dirty yellow, which produces the general chocolate colour already mentioned; the feet and tail are blacker than any other parts: the claws are white underneath and brown above; and its tail is about two inches and a half long.

The polecat, like the fox, avoids as much as possible the human countenance; and, like the fox too, possesses the most undaunted courage. However, in comparing these two animals, though they happen to agree in the two particulars just mentioned, yet they are enemies to each other: or, in other words, the fox will not fail to kill the polecat when-

ever they meet; in fact, the fox may be regarded as the unrelenting enemy of all the smaller vermin. Reynard will kill and eat the wild cat, or any other cat which might happen to come in his way; as well as the polecat, the weasel, the stoat, the rat, &c.

The polecat evinces an insatiate thirst for blood, and is very destructive to all kinds of young game; and if it is not openly so to that which is full grown, it is because it is not so easily caught: it will surprise hares on their seats, will seize partridges or pheasants on the nest; and is incredibly destructive in a rabbit warren: it will, like all the other animals of the weasel tribe, kill much more than it can devour; in fact, so fond are these animals of sucking the blood of their victims, that, in a place like a rabbit warren, or wherever their food is presented in such abundance, the polecat (and the same of the weasel and stoat) would continue destroying, if undisturbed, merely for the sake of the blood.

The polecat is particularly destructive among pigeons, when it happens to get into a dove-house:—it despatches each bird with a single wound near to, or in, the head; and, after killing all it can, and sucking their blood, will convey them to its retreat. This the animal will carefully perform, going and returning, and bringing them one by one to its hole; but if it should happen that the opening by which it got into the dove-house be not large enough for the body of the pigeon to pass through, this mischievous animal contents itself with carrying away the heads, and makes a most delicious feast upon the brains.

The polecat is also fond of honey, frequently robbing the bee hives in winter, a period when its prey is not so easily found in the woods and fields.

Their retreat is generally in banks well sheltered with brambles or underwood, or amongst brakes or woods, or other similar situations. They burrow in the ground, making a tolerably large hole, about two feet deep, which may easily be known by any one who has once noticed the hole of a polecat. In winter, they will frequently approach houses or buildings, and will rob the hen-roost, the pigeon-house, or even the dairy, when pressed by hunger: on these occasions, they contrive to form a retreat in or under some of the walls; and if they are unable to secure an asylum of this sort, they will make their way under the corn stacks, and whenever this happens to be the case, all the rats in the immediate vicinity remove to a greater distance; the polecat is a deadly enemy to the rat, and of this the latter is very well aware; and yet it would appear that the polecat (from its size) is unable to follow it through its burrows or runs; and the rat, as if conscious of this incapacity in the former, removes no further from the presence of its enemy than what may suit its convenience. The writer witnessed an instance, where a great number of rats were found in a stack of wheat, but all of them in the upper part; for several feet from the ground not a rat was to be met with, which excited some surprise; but the circumstance developed itself on reaching the bottom, where it was found an enormous polecat had taken up its abode.

The female brings forth her young in the spring, to the number of from four to six. To "stink like a polecat" is a common observation in some parts; and indeed so impregnated does every part of the animal appear to be with a very offensive fetid matter, that even the fur, which is soft and warm, can scarcely be divested of it. Whenever the polecat happens to be killed, the fetid matter just mentioned issues from the pores of its body in great quantities, forming a very unpleasant effluvium, which is perceptible even at some distance.

There are farmers to be met with who, whenever a polecat approaches their barns, buildings, or houses, afford it every possible protection, on account of its enmity to rats; but as its chief propensities are in direct opposition to the views of the sportsman, so gamekeepers should be careful to destroy it wherever it is to be met with.

If taken young, the polecat is not difficult to tame; nor in a domestic state is it offensive to the human olfactory organs; as although it is impregnated with a fetid matter, yet it would seem that the effluvium which thence arises is only thrown off when the animal is killed or very much alarmed.

The polecat is seldom seen during the day, unless compelled by hunger to quit its retreat; but, as soon as night sets in, it leaves its hole in quest of prey, when it may be pursued and killed by terriers. In the midland counties hunting the polecat by moonlight forms a diversion for schoolboys and the younger branches. After night-fall, when the polecat rambles abroad, its hole (if known) is stopped, the terriers are thrown off, one of which, upon whom the greatest dependence can be placed, has a small bell fastened round his neck, in order that the hunters may know where the dogs are questing. When they hit upon the scent, the terriers give tongue; and as soon as the polecat finds himself pursued, he makes directly for his hole, which, if stopped, he cannot of course enter, and is compelled to seek some other retreat, during which he is perhaps killed; if run to ground, he is very unceremoniously dug out and worried on the spot, it being a general opinion amongst the vulgar (in Leicestershire for instance), that whenever or wherever a polecat

is run to ground, they have a right to dig him out.

The above method, however, is not the mode in which I would recommend gamekeepers to destroy the polecat; for the accomplishment of their purpose, they can go a much shorter and surer way to work: this animal seems possessed of little cunning, and is trapped with little difficulty. The steel trap is generally used for this animal; but it may be taken in the following manner:—box traps may be set in the bottom of ditches, or under walls or pales, with the ends of the traps fenced up to, for four or five yards aslant, and two or three yards wide at the entrance, with earth, bushes, or broken pales, so that the animal cannot pass without entering the trap. A trail of red herrings, half broiled, should be drawn from one trap to another, and the traps should be baited with the same material, with which also the ends of the traps may be rubbed. By having both ends of box-traps painted white, and rubbed with herrings or the entrails of any animal, hares will be deterred from entering. This mode is well calculated to catch the wild cat, or indeed any kind of quadrupedal vermin. Therefore, when any of the traps are sprung, a bag sufficiently large to admit an end of the trap is to be provided and slipped over it; and by rattling at the other end of the trap, the creature will spring into the bag; for, without some such precaution, should a wild cat be caught, the moment the light is admitted it will fly in the face of the person opening it. This is the method generally adopted by warreners.

The steel-trap, however, is by far the best and surest method of taking the polecat—and indeed the best method of catching all kinds of vermin. It is more portable, more easily prepared, and very rarely fails in its operation.—*Gamekeeper's Directory.*

Polish, *v.* To smooth, to brighten by attrition.

Polish, *s.* Artificial gloss, brightness given by attrition.

Polisher, *s.* The person or instrument that gives a gloss.

Poll, *s.* The head; a fish called generally a chub, a cheven.

Pollard, *s.* A tree lopped; the chub fish.

Pollen, *s.* A fine powder, commonly understood by the word farina, as also a sort of fine bran.

Pollevil, *s.* Pollevil is a large swelling, inflammation, or imposthume in the horse's poll or nape of the neck.

Pollock, *s.* A kind of fish. This species is abundant on the British coasts.

Polygon, *s.* A figure of many-angles.

Pommel, *s.* A round ball or knob; the knob that balances the blade of the sword; the protuberant part of the saddle before.

Pond, *s.* A small pool or lake of water, a basin, a water not running or emitting any stream.

Very little is known of the habits and economy of fish, from the nature of the element in which they live. When I resided in Bushy Park, I caused the sides and bottom of a place to be bricked, through which a stream of very clear water ran, and stocked it with most of the varieties of our English fresh-water fish, supplying them abundantly with food; but though I constantly watched them, and could see all they did at any time of the day, the result of my observations was far from being satisfactory. The perch were the boldest and most familiar of any of the fish, as I found no difficulty in soon getting them to come with eagerness to take a worm out of my hand. The barbel were the shyest, and seemed most impatient of observation, although in the spring, when they could not perceive any one watching them, they would roll about and rub themselves against the brickwork, and show considerable playfulness. There were some large stones in my *piscatorium*, round which they would wind their spawn in considerable quantities. The trout appeared to bear their confinement with less philosophy than any of the others, making high leaps against the grating which admitted the water, and seeming at all times out of sorts and out of condition. The chub were also very restless, being continually on the move, but they never could resist a cockchafer when thrown to them. My flounders only moved at night, and the eels always made their escape, but in what way I never

could conjecture, except, indeed, they had the power of crawling up the brick-work, which was about five feet from top to bottom, and generally two feet above the edge of the water. They certainly could not get through the grating, which was sufficiently close to confine bleak and gudgeons; and some of the eels were of a large size. The pike, of which I had eight of about five pounds' weight each, kept up their character for voracity. Out of 800 gudgeons which were brought to me by a Thames fisherman, and which I saw counted into the reservoir—some few of which, however, died—there were scarcely any to be seen at the end of three weeks; though I should mention, that three large barbel I had, and six good-sized perch, probably partook of them.

* * * *

Jesse, p. 86, says, I will now give an account published by Mr. Neill, in the Scots' Magazine, of some sea-fish kept in a small pond into which sea-water could be introduced. This pond was from time to time replenished with fish. The following fishes were in it:—

1. *Cod.*—They were lively, and caught greedily at shell-fish which were thrown into the pond. They kept chiefly, however, in the deep water, and, after approaching with a circular sweep, and making a snatch at the prey, descended out of sight to devour it.

2. *Haddock.*—These, contrary to expectation, were found to be the tamest fishes in the pond. At ebb tide they came to the inner margin, and ate limpets from the hand of a little boy, the son of a keeper. They appeared white, and rather sickly.

3. *Coalfish.*—Some of these were of a large size, exceeding in dimensions the largest cod in the pond. They were bold and familiar, floating about slowly and majestically, till some food was thrown to them; this they seized voraciously, whether it consisted of shell-fish or ship biscuit. They would also occasionally approach the margin, and take their food from the keeper's hand.

4. *Whiting.*—These were scarce in the pond, and very shy.

5. *Pollack.*—This was pretty common, and has been found to answer well as a pond fish.

6. *Salmon.*—This was the wildest and quickest in its motions of all the inhabitants. When a muscle or limpet, freed from the shell, was thrown on the surface of the water, the salmon very often darted forward and took the prey from all the competitors, disappearing with a sudden jerk and turn of the body.

7. Flat fish or flounders, of two sorts, were also in the pond, but they naturally kept at the bottom, and were not seen.

The food given to the fishes consisted chiefly of sand-eels and of shell-fish, particularly limpets and muscles. In the herring-fishery season, herrings were cut in pieces for this purpose.

It is remarkable that all the kinds of sea-fish above enumerated, seemed to agree very well together. No fighting had ever been observed by the keeper, and seldom any chasing of one species by another. None of the fish ever bred.

Dr. Fleming has remarked, that when a salt-water fish is put into fresh water, its motions speedily become irregular, its respiration appears to be affected, and, unless released, it soon dies; and that the same consequences follow when a fresh-water fish is suddenly immersed in salt water.

This is not, however, the case with all fish. A cod will not only live, but thrive well in fresh water, if properly fed. A respectable fishmonger assured me that he had tried the experiment, and succeeded, and offered to send me some live cod in a well-boat, for my *piscatorium* in Bushy Park.

* * *

Immense value of pond fish.—The fish in the ponds of Lucullus, sold, after his decease, for 3,000,000 of sesterces (24,218*l.* 15*s.* sterling). Cains Hirtus first introduced the keeping of lampreys in stews, and lent Cæsar, during the time of his triumph, 600 of these fish, for which he would receive no equivalent in money, nor any other commodity, but conditioned the repayment to be the same number and weight of lampreys. His ponds and fish about his house, which was itself extremely small, were sold for one million more than the above sum (32,291*l.* 13*s.* 4*d.*)

* * *

In August 1799, the Earl of Essex fished a large pond near Radnor Forest, which had been stocked fifty-eight years, Carp and eels were the only fish found in it; of the former, 100 brace were taken that weighed from fourteen to fifteen pounds each carp; of the latter, the largest exceeded eight pounds.—*Jesse—Daniel.*

Pony, *s.* A small horse.

Poodle (*Canis aquaticus minor*), *s.* *Vide* Water Dog.

A friend of mine had a poodle-dog possessed of more than ordinary sagacity; but he was, however, under little command. In order to keep him in better order, my friend purchased a small whip, with which he corrected the dog once or twice during a walk. On his return the whip was put on a table in the hall, and the next morning it was missing. It was

soon afterwards found concealed in an outbuilding, and again made use of in correcting the dog. It was, however, again lost, but found hidden in another place. On watching the dog, who was suspected of being the culprit, he was seen to take the whip from the hall-table, and run away with it, in order again to hide it. The late James Cumming, Esq. was the owner of the dog, and related this anecdote to me.—*Jesse.*

POOKA, *s.* A mode of fishing sometimes used in the Irish lakes.

By mesh-nets immense numbers of pike are annually taken; and with night-lines, and a very simple contrivance, called the pooka, these fish, with the largest trout and perch, are constantly killed.

This latter implement is formed of a piece of flat board, having a little mast and sail erected on it. Its use is to carry out the extremity of a long line, of considerable stoutness, to which, at regulated distances, an infinity of droppers or links are suspended, each armed with a hook and a bait. Corks are affixed to the principal line or back, to keep it buoyant on the surface; and from a weather-shore, if there be a tolerable breeze, any quantity of hooks and baits can be floated easily across the water. The corks indicate to the fisherman when a fish is on the dropper, and in a small punt, or curragh, he attends to remove the spoil and renew the baits when necessary. Two hundred hooks may be used on the same line, and the pooka at times affords much amusement, and often a well-filled pannier.—*Wild Sports.*

POOL, *s.* A lake of standing water.

PORE, *s.* A spiracle of the skin, the passage of perspiration; any narrow spiracle or passage.

PORK, *s.* Swine's flesh. PORKER, *s.* A hog, a pig.

POROUS, *a.* Having small spiracles or passages.

PORRIDGE, *s.* Food made by boiling meat and other ingredients in water.

PORT, *s.* A harbour, a safe station for ships; the aperture in a ship at which the gun is run out; carriage, air, mien; the name of the wine of Oporto in Portugal.

PORTABLE, *a.* Manageable by the hand; such as may be borne along with one; such as is transported or carried from one place to another.

POSTHASTE, *s.* Haste like that of a courier.

POSTHORSE, *s.* A horse stationed for the use of couriers.

POT, *s.* A vessel in which meat is boiled on the fire; vessel to hold liquids; a vessel made of earth; a pewter vessel or mug, holding a quart or pint of beer.

POTATO, *s.* An esculent root. Potatoes are given very much in Ireland to fatten lean horses. When only given in small quantities they are not objectionable for horses who do but little work.

POUCH, *s.* A small bag; a pocket.

POULT, *s.* A young chicken, particularly of a turkey or grouse.

POULTERER, *s.* One whose trade is to sell fowls ready for the table.

POULTICE, *s.* A cataplasm, a soft mollifying application.

Poultices or cataplasms are used for promoting suppuration in inflamed tumours, and in grease, scratches, cracks, &c. The poultices commonly employed on those occasions are of the emollient kind.

EMOLLIENT POULTICES.

No. 1.	Linseed meal	½ lb.
	Bran	3 quarts.
	Hogs' lard	4 oz.

Boiling water enough to make a soft poultice.

No. 2. Turnips thoroughly boiled and mashed; any quantity. Linseed meal enough to form the poultice.

Either of the simple poultices may be converted into an anodyne poultice by the addition of opium; into a fomenting poultice, by the addition of yeast, and by substituting oat-

meal for linseed meal: into an astringent poultice, by the addition of Goulard's extract, sugar of lead, or powdered alum; and into a detergent poultice, by the addition of white or blue vitriol.

In obstinate cases of virulent grease, where there is much pain, and a stinking dark-coloured discharge, and especially when emollients are found ineffectual, the detergent poultice has quickly cured the disease, and in such cases even a solution of corrosive sublimate has been used with the best effect.—*White.*

POULTICE, *v.* To apply a poultice or cataplasm.

POULTRY, *s.* Domestic fowls.

POUNCE, *s.* The claw or talon of a bird of prey; the powder of gum sandarach.

POUND, *s.* A certain weight, consisting, in Troy weight, of twelve, in Avoirdupoise, of sixteen ounces; the sum of twenty shillings; a penfold, an enclosure, a prison in which beasts are enclosed.

POWDER, *s.* Dust, any body comminuted; gunpowder.

POWDER FLASK, *s.* A flask to hold powder.

To obviate the danger of the powder being inflamed and communicated to that in the flask whilst loading, have a brass top made to go over that which screws on the flask, and which the opening of the spring supplies from it; by putting the charge of powder into the detached brass covering, and from that pouring it into the barrel; should there be any tow, after cleaning and flashing off some powder, or, after discharging, any wadding remaining on fire within, (which last may happen when paper, but never can when hat or leather wadding is used,) the whole of the powder that can explode will be the single charge in the brass covering.

Mr. Egg and Mr. Sykes have each got patents for powder flasks, in which, if a charge is blown up, all communication is so effectually prevented, that no farther damage can be done. I have seen the one of Mr. Egg repeatedly tried by himself. To do this, he dropped a red hot nail into the barrel, which, of course, instantly fired the measure put into it. He then unscrewed the top, and showed me the remainder of the powder in the horn, having only guarded his right hand by a shield of pasteboard, to avoid being burnt by the charge from the barrel.

The principle of it is so secure as to render it impossible for the powder in the flask to ignite, while in the act of loading, by the passage being completely cut off, from the lever being placed on the top of a strong plate instead of underneath. It also prevents the flash out of the barrel from injuring the hand, as the charger is fixed in an octant position, with a vent to let out the flame.

The springs of these powder horns must be kept very clean and free, or, like many ingenious patents, they will fall victims to the abuse of slovenly sportsmen. Mr. Egg says, he "begs leave to caution gentlemen of a trumpery Sheffield flask (sold in the shops), with an upright charger, not being calculated to answer the purpose intended, though it is an infringement on his patent."—*Hawker.*

POWDERHORN, *s.* A horn case in which powder is kept for guns.

As to your horn, the best thing you can do, when it remains pretty full at the end of a day, is to leave it in a very dry place in a warm room. For my own part, being persuaded that so much depends upon this, I always have my powder packed in half-pounds, a spare one of which I usually carry about me, and never open it until my horn is empty; and I am certain that more depends upon the quality and state of the powder than is usually ascribed to it.—*Hints to Sportsmen.*

POWDERMILL, *s.* The mill in which the ingredients for gunpowder are ground and mingled.

POWDER PROVER, *s.*

Powder Prover.—The proper "epreuvette" is very correctly made; the wheel on which the gradations are marked is large, and the spring strong, consequently the resistance to the force of the powder is considerable. The stronger it is the better; for without the resistance is strong, a correct proof cannot be obtained; because if not sufficiently strong to detain the powder in the chamber long enough for all the particles to ignite, many of them

(especially in powder of good firm grain) will fly off unburnt, and of course a part only of the charge would be proved.

The part attached to the wheel of the epreuvette, which shuts the mouth of the chamber, should be so nicely adjusted, that on looking closely at the parts when in contact, no light can be seen between them; for if any light, there is of course so much vacancy, and consequently so much windage; and in proportion to the windage the proof will be lower, and therefore incorrect.

Three fires at least should always be made in proving, and the average taken as the mean amount, for variations frequently happen in fires immediately following each other, although made with considerable attention. Care should be taken after every fire to clean the chamber nicely, or otherwise the foulness left by the preceding discharge would lessen the space, by which the succeeding charge would become proportionally less.—*Hawker.*

PRECIPITATE, *s.* A corrosive medicine made by precipitating mercury.

Red precipitate, nitric oxide of mercury, or red nitrated quicksilver, is a mild caustic, and an efficacious remedy in foul ulcers. It may be used alone, finely powdered and sprinkled on the affected part; or mixed with various ointments. It is made from quicksilver and nitrous acid, but is considerably weaker than a solution of that metal in nitrous acid. It becomes, however, a strong and very efficacious caustic, when dissolved in nitrous acid. This solution may also be mixed with unctuous substances, forming with them good *detergent ointments;* or it may be diluted with water so as to form a detergent lotion of considerable strength.—*White.*

PREDACEOUS, *a.* Living by prey.

PRESERVE, *s.* Fruit preserved whole in sugar; a place set apart for breeding and protecting game.

To preserve Birds.—Large birds should be carefully skinned; the head, tail, and feet, left entire. The skin may then be either put into a vessel of spirits, or rubbed well on the inside with the following mixture:—One pound of salt, four ounces of alum, and two ounces of pepper, pounded together. Small birds may be thus treated:—Take out the entrails, open a passage to the brain, which should be scooped out through the mouth; introduce into the cavities of the skull and the whole body some of the above mixture, putting it also through the gullet and entire length of the neck; hang the bird in a cool, airy place, first by the feet, that the body may be impregnated by the salts, and afterwards by a thread through the under mandible of the bill, till it appears to be sweet; then expose it in the sun, or near a fire. After it is well dried, clean out what remains loose of the mixture, and fill the cavity of the body with wool, oakum, or any soft substance.

* * *

If you shoot a curious bird, and have not the means of getting it stuffed while fresh, you may preserve the skin of it for many months by putting therein dry tow and powdered ginger. May and June are the only months that you need fear the moth; and just then cedar shavings or camphor would be a good addition. To skin a bird, open him either on one side or down the back.

* * *

To send grouse any distance, put some pepper to the parts where they have been shot, as well as into their mouths, and then pack them carefully, separated from each other, and keep as air tight as possible in boxes of hops. —*Hawker.*

PRICK, *v.* To pierce with a small puncture; to erect with an acuminated point; to set up the ears; to animate by a puncture or mark; to spur, to goad.

PRICKET, *s.* A buck in his second year.

PRICKLE, *s.* A small sharp point. PRICKLY, *a.* Full of sharp points.

PRIME, *v.* To put in the first powder, to put powder in the pan of a gun.

PRIMERO, *s.* A game at cards.

PRIVATEER, *s.* A ship fitted out by private men to plunder enemies.

PRODUCE, *s.* Product, that which anything yields or brings. PRODUCE STAKES. *Vide* RACING.

Projectile, *s.* A body thrown forward with violent force, as a stone from a sling, or a ball discharged from a cannon.

Proof, *s.* Evidence, testimony, convincing token; test, trial, experiment; firm temper, impenetrability; armour hardened till it will abide a certain trial.

Proof of Barrels.—There has been lately cast in the foundery at Ruelle, near Angoulême, a cannon, after a model differing a little from that formerly adopted, and which has been submitted to an extraordinary trial, called "proof to the utmost." This trial, the result of which was to burst the piece, was composed of two series, one of fifty, the other of fifty-seven shots, in which the charge was successively increased, so that the quantity of powder in the charge was raised to twenty-eight pounds instead of six, and the number of balls amounted to twelve. For the last six shots they succeeded in filling the barrel entirely with clay over the balls; and besides, in some of the last shots they secured each by four iron wedges, fastened on in such a manner that the number of these wedges was sixteen for the 106th shot, and as many for the last.

Prowl, *v.* To wander for prey, to plunder. Prowler, *s.* One that roves about for prey.

Prune, *v.* To dress, to prink; to smooth a bird's feathers.

Prussian Blue, *s.* A dark blue pigment obtained from bullock's blood, carbonate of potash, vitriol of iron, alum, and muriatic acid.

Prussic Acid, *s.* A deadly poison.

Puet, *s.* A kind of water-fowl.

Prophylactic, *s.* A preventive against canine madness.

The oldest prophylactic with which we are acquainted is suction. We have very ancient records of its employment, and, if we can believe these legends, a particular family enjoyed the privilege, or devoted themselves to this process of drawing, by the application of the mouth to the wound, the poison inserted by a venomous animal. A ligature has also been recommended to stop the progress of the rabid poison, but, according to the present theories, it can have no preventive efficacy whatever.

Cold-bathing, but particularly sea-bathing, as a preventive, is a practice also of great antiquity, and, even yet, the uninformed classes place implicit reliance on it. Its incapability of insuring safety was, however, early noted; and Palmerius, Ambrose Parey, Desault, and others, were at much pains to discredit the practice: nevertheless, both hot and cold bathing long retained some powerful advocates. However respectable the authorities in its favour, the lamentable experience of many who have trusted to its efficacy, even when performed, as Van Swieten has it, *ad suffocationem usque*, but too well proves. Among the well informed, therefore, no reliance is now placed on it.

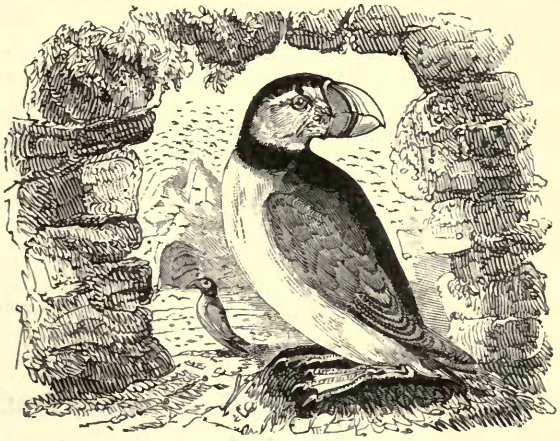
Mercury has long been employed as a prophylactic. Sauvages must have been greatly deceived by its ill-deserved reputation. Sir G. Cobb's famous Tonquin remedy, so highly extolled by Claude Duchoisee, in India, was prepared from the native and factitious cinnabars, with musk. Turpeth mineral, which is a sub-sulphate of this metal, was highly extolled by Tissot, and has been very generally used among the dogs of this country. Many other authorities of note have extolled the preventive efficacy of mercury, from its power in counteracting the effects of the syphilitic poison; but as it has entirely failed in man and beast, under every advantage of administration, so it has ceased to be relied on as solely sufficient to guard the constitution. Neither has arsenic any more claim to the character of a preventive than it has as a curative.

Dr. Mead's *pulvis antilyssus*, composed of lichen cinereus and black pepper, has wholly lost its reputation, although, during his practice, he expressed a wish that he knew as certain a preventive for any other disease. The Ormskirk remedy is also another striking proof how easily a reputation may be gained, and how undeservedly: for although palpable instances of its failure are numerous, it once enjoyed great reputation, and is even yet occasionally trusted to. The water plantain (alisma plantago) has also proved one of those unfortunate articles offered to notice, which only served to raise hopes it was doomed never to realise. As it came recommended by a Russian counsellor of state, M. Jalowsky,

at the express direction of his government, it met with a cordial reception, and a full trial in England and elsewhere, but everywhere it proved fallacious, both as a preventive and cure.

To enumerate all the other articles, particularly of the vegetable world, that at some period or other have been deemed prophylactics, would be endless. Among the most popular we may mention the eglantine, or wild rose (*rosa sylvestris*, Linn.), pimpernel (*anagallis*), deadly nightshade (*atropa belladonna*), rue (*ruta*), garlic (*allium sativum*), sage (*salvia*), daisy (*bellis*), vervain (*subena*), fern (*polypodium*), wormwood (*artemisia arborescens*), mugwort (*artemisia vulgaris*), betony (*betonica*), and the tree-box (*buxus*). —*Blaine.*

PUFFIN, COULTERNEB, MULLET, SEA PARROT, POPE, or WILLCOCK, (*Alca arctica*, LINN.; *Le Macareux*, BUFF.) *s.* A water-fowl; a kind of fish; a kind of fungus filled with dust.



The puffin weighs about twelve ounces, and measures twelve inches in length, and twenty-one in breadth. Its singular bill looks not unlike a kind of sheath slipped over both mandibles; and, from its appearance, the bird is not improperly named coulterneb, or knife-bill. At the base, where it is about an inch and a half in depth, it is rimmed with a white callous border, the two corners of which project above the brow, and below the chin. It is about the same in length, curved towards the point, compressed vertically, very flat, and transversely furrowed on the sides; the half of it adjoining to the head is smooth, and of a fine lead-coloured blue; the other part, to the tip, red: the nostrils are placed in long narrow slits, near the edge of the bill; the corners of the mouth, when closed, are curiously puckered, and form a kind of small star, or rose; the eyes are protected by small callous protuberances, both above and below; the edges of the eye-lids are crimson; irides grey; the chin and cheeks are white, bordered with grey—the latter much puffed up with feathers, which makes the head look large and round. From behind the corner of each eye the feathers are curiously separated, forming a narrow line, which reaches to the hinder part of the head: the crown of the head, hinder part of the neck, and upper part of the plumage, are black, and a collar of the same colour encircles the neck; the under parts are white; the tail consists of sixteen feathers; the legs are reddish orange.

The puffin, like others of the same genus, takes wing with great difficulty, and walks upon the whole length of the leg and foot, with a wriggling awkward gait. In tempestuous weather it takes shelter in caverns and holes in the nearest rocks, or in those made by the rabbit on the beach among the bent grass, in which it sits dozing, in snug security, till the return of the calm weather; for these birds cannot brave the storm, and it is not uncommon, when they have been overtaken by it, to find them drowned and cast on shore. Various kinds of fish, such as small crabs, shrimps, sprats, and also seaweeds, are said to

be the food upon which they live; but it is evident from the structure, great strength, and sharpness of the bill, that they are furnished with powers to crush and pluck out other kinds of shell-fish, which ornithologists have not noticed.

The female makes no nest; she deposits her single whitish-coloured egg upon the bare mould, in a hole, dug out and formed in the ground, by her mate and herself, for that purpose; or in those which they find ready made by the rabbits, whom they easily dislodge. The parent birds are very attentive to their young, which they will defend to the last, by severely biting whatever enemy attempts to molest them, and will suffer themselves to be taken rather than desert them: and yet, notwithstanding this uncommon attachment, when the day of migration comes, the young, which are not able to fly, are left behind, and mostly perish of want, or are destroyed by birds of prey.

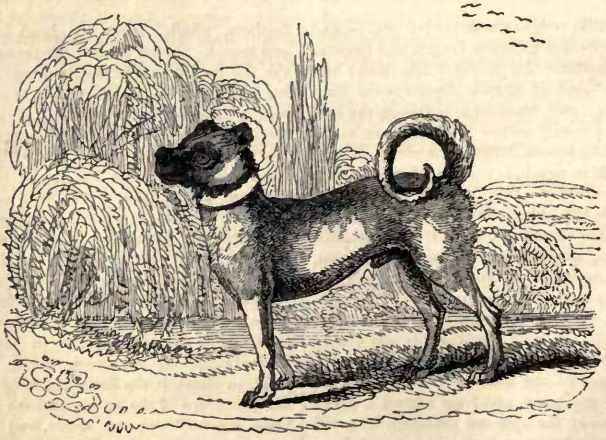
The bite of these birds is very severe: one sent to the author in a box, covered with netting, caught hold of the finger of a poor man, and brought away the fleshy part, as if it had been cut out with a knife; but they may be tamed, and soon become familiar. They are fed on fish and other animal substances.—These birds are spread over various parts of the northern world, and are met with on almost all the rocky cliffs on the coasts of Britain and Ireland, and on many of the surrounding isles, in immense numbers. They congregate in flocks of magnitude, regulated by the accommodations afforded them at their breeding places, at which they first assemble early in April, but do not settle to prepare for the business of incubation till May. They hatch their young in the beginning of July; from which time until nearly the middle of August, they are employed in returning and rearing their brood: when this is accomplished, the whole associated swarm leaves the place at once, and pursues its route to other regions, more suited to their future exigencies, there to spend the remainder of the varied year. * * *

Astonishing emigration of puffins.—A most extraordinary event took place at the great island of Arran, lying at the mouth of the bay leading to Galway, in Ireland, some years ago. The stupendous cliffs to the south-west of the island, which, from time immemorial, had been the place of resort, or rather the natural habitation of such numbers of rock-birds or puffins, as is almost incredible, were at once deserted, on the 24th of June, by that entire species of fowl, which abandoned their nests, eggs, and young ones, and went off to sea. The like incident is said to have happened forty years before, and no reason whatever could be assigned for these most extraordinary derelictions.

PUFFY, *a.* Windy, flatulent; tumid, turgid; out of wind.

PUG, *s.* A kind name for a monkey, or anything tenderly loved.

PUG DOG (*Canis Pricator*, GMELIN), *s.*



This variety is so nearly allied to the bull-dog (from which he is descended by a cross with the small Danish) in form and general appearance, that a detailed description is quite

unnecessary. The chief difference is in its size, being much smaller, and its tail curled upon its back. It differs extremely in another particular, which is in courage, this animal being as timid as the other is valiant.

This dog was formerly very common in many parts of Great Britain, but is now becoming very scarce, from the circumstance, we have no doubt, of its being so useless. It may be prized as a pet, but certainly not for its beauty. Although its admirers in this country are becoming very limited in number, we are informed by Mrs. Piozzi, that in Italy it is a great favourite, more particularly at Padua.

There is a Sunday market at Moscow, where German pug dogs, which are so dear in London, can be bought for a sum of money equivalent to a shilling.

PULLET, *s.* A young hen.

PULSE, *s.* The motion of any artery as the blood is driven through it by the heart, and as it is perceived by the touch; vibration; leguminous plants.

It seems, by the nicest observations, that the pulsations of a healthy horse seldom exceed from forty to forty-five in a minute; exceeding which, in any material degree, there is then reason to believe inflammatory heat is predominant in the frame, and that fever is rapidly advancing in proportion to the increased velocity of the blood.

PULVERISE, *v.* To reduce to powder, to reduce to dust.

PUMICE, *s.* A light and spongy cinder of some fossil. It is ejected from volcanic mountains, or procured in melting glasses.

PUNCH, *v.* To bore or perforate by driving a sharp instrument.

PUNCH, *s.* A pointed instrument, which, driven by a blow, perforates bodies; a liquor made by mixing spirit with water, sugar, and the juice of lemons or oranges; an implement for cutting out hat or card waddings.

To make Punch.—A wine-glass nearly full of best refined lump sugar pounded. Twelve ditto of cold spring water, a lime, and half a lemon, (or if no lime, a whole lemon, which might yield about half a wineglassful of juice). Two wineglasses brim full of old Jamaica rum. Let the sugar be well melted, and the lemons thoroughly amalgamated with it and the water, before you add the spirit.

* * *

It is better to make the punch with boiling water the night before it is required for use. Strain it in the morning, and place the bottles in a well or stream of water, sheltered from the sun. When wanted at dinner time, you will have a cooler and much more mellow beverage than if the water had been taken from the spring.—*Hawker—Wild Sports.*

PUNCTURE, *s.* A hole made with a sharp point.

PUNGENT, *a.* Pungent, sharp on the tongue, acrid; piercing, sharp, acrimonious, biting.

PUNT, *s.* A light flat boat for fishing and shooting.

Dressing for Punts and Canoes.—To keep gunning punts and canoes from leaking, or, as those who use them call it, weeping, melt a pint of tar with a pound of pitch, and either half a pint of common oil, or a proportional quantity of suet. You have then only to pour a little of this mixture into the seams of your punt, and, instead of bedaubing her all over the bottom, as we did in the old school, seven or eight years ago, have the bottom painted with one or two coats of red lead, which will last much longer, and with which the boat rows much lighter.

White resin and mutton suet is even a better dressing, and by far the lightest of any.

* * *

Punt Shooting.—The punt shooters (men who earn their livelihood in winter by attacking the wild fowl, night and day, according as the tide serves) kill great numbers. The pursuit is hazardous, especially when there is much ice in the river, by which they sometimes get encircled, and then can only float with the current, and are kept often two or three tides before they can extricate themselves, and their punt is ill calculated to sustain pressure against its sides, which are not

twenty inches high from the surface of the water; in this the punter by night drops down with the tide, or uses his paddles after the fowl; he knows their haunts, and takes every advantage of wind, tide, moon, &c.; his gun, which carries as much as a little cannon, is laid with the muzzle over the stem of the punt, in a hitch, which regulates the line of aim: at the bottom of the punt he lies upon his belly, and gets as near the rout of fowl that are upon the water as possible; when within the range of his gun, he rattles with his feet against the bottom of his punt, and when the fowl begin to spring at this unexpected sound, at that moment he pulls the trigger, and cuts a lane through their ranks, he instantly follows the direction of his shot, and gathers up those that are killed, or just expiring, for very seldom he makes it answer to row after fowl only wounded. He then charges his gun, and drifts further down the river, in hopes of a second, third, and successive shots. By this mode a man has brought home from fourscore to an hundred wild fowls, of various kinds, in one night's excursion; and this will not seem an exaggerated account, when the multitudes which, in hard frosty weather, with the wind at east or north-east, haunt the Blackwater river are known. The numbers that are seen in their day-flights, and the noises of the various kinds of a night, are almost beyond belief: to the compiler, prepared as he was to behold amazing quantities, they exhibited far beyond what he was led to expect, and to others who have seen their throngs, the astonishment has been perhaps still greater. A punt shooter of the name of Bowles, has been known to clear upwards of an hundred pounds in a season by his gun; the wild fowl were sold to the higlers, &c., at two shillings a couple, one with the other; allowing his expenses to be only thirty pounds, here were two thousand six hundred birds brought home; an immense destruction, when the whole period alloted for it does not much exceed five months. Forty-two wigeons have been killed at a single shot in the day-time, and the difficulty of approaching the great flocks of fowl in the light is tenfold. A man, in whose punt the compiler was, got eighteen wigeons at one shot, and many that were crippled, escaped. If in the day, or at night, the punters get a shot at the fowl at feed upon the ooze, they tie on their plashes (similar to the mud-pattens used in Hampshire), and collect their spoil.

The best time for this shooting is the first or second day's thaw after a sharp frost, and when deep snow has long covered the ground; the fowl are then flying in every direction to dabble in the fresh water, which then appears all around inviting them. Another favourable opportunity is at the commencement of a frost, with the wind strong at east, and a sleet or snow falling: if the guns can but be kept dry, there is no complaint about the using them, and the fowl in such weather always fly lower than when the atmosphere is clear.—*Daniel—Hawker.*

Pup, *v.* To bring forth whelps, used of a bitch bringing young.

All dogs that are much domesticated and confined, appear particularly subject to difficulty in bringing forth; consequently during pregnancy much exercise should be given, as nothing tends more to easy parturition than full exercise. Sometimes the constitution itself, in these tender and artificial breeds, is not equal to the exertion of labour; and sometimes false presentation increases the obstruction. Whenever a difficulty in pupping occurs, which has existed more than four or five hours, the bitch should be examined by means of a finger passed up the vagina; and, if any portion of a pup should be found to present itself, so as to be within reach of the finger, a skein of worsted ought, if possible, to be fastened around it; and, during the throes, or labour pains of the animal, it should be gently drawn away. If it cannot be reached in this way, a little longer time may be allowed; but, after all, should it not advance, a pair of forceps may be used to assist the extraction. It is a good practice to give a laxative as soon as any symptoms of pupping appear; and, when delivery seems much delayed, it will be prudent, in all cases, to bathe in warm water, and to give nutriment if the labour is protracted: occasional doses of laudanum united with æther must be given if any convulsive appearances come on. The patience of bitches in labour is extreme, and their distress, if not relieved, is most striking and affecting. Their look is, at such times, particularly expressive, and apparently imploring.—*Blaine.*

Puppy, *s.* A whelp, a progeny of a bitch; a name of contempt to an impertinent fellow.

Purgative, *a.* Cathartic, having the power to cause evacuation downwards.

Purge, *v.* To cleanse, to clear from impurities; to evacuate the body by stool; to have frequent stools.

Purge, *s.* A cathartic medicine, a medicine that evacuates the body by stool.

Purl, *s.* A kind of medicated malt liquor, in which wormwood and aromatics are infused.

Purple, *a.* Red, tinctured with blue.

Purple, *v.* To make red, to colour with purple.

Pursenet, *s.* A net of which the mouth is drawn together by a string.

Pursiness, *s.* Shortness of breath.

Purulent, *a.* Consisting of pus or the running of wounds.

Pus, *s.* The matter of a well-digested sore.

Puss, *s.* The fondling name for a cat; the sportsman's term for a hare.

Pustule, *s.* A small swelling, a pimple, an efflorescence.

Pustulous, *n.* Full of pustules, pimply.

Put, *s.* A clown; a vulgar game at cards.

Put, played with a complete pack, generally by two people, sometimes by three, and often by four, is a game at which the cards rank differently from all others, tray being the best, next the deuce, then ace, king, and so on in the usual order, as at whist. After cutting for deal, &c., at which the highest put card wins, three cards, by one at a time, are given to each player, then the game is played in the following way. If the non-dealer throw up his cards he loses a point; if he play, and the dealer do not lay down another to it, he gains a point; but should the dealer either win the same, pass it, or lay down one of equal value, forming what is styled a tie, the non-dealer is still at liberty to put, that is play, or not, and his opponent then only gains a point; then if both parties agree to go on, whoever gains all the tricks or two out of three, wins five points, which are the game; if each player win one trick, and the third be a tie, then neither party scores.

Four-handed put differs only in this, that on both sides, one of the players gives his best card to his partner, who lays out one in lieu of it, and the game is afterwards played as in two-handed put.

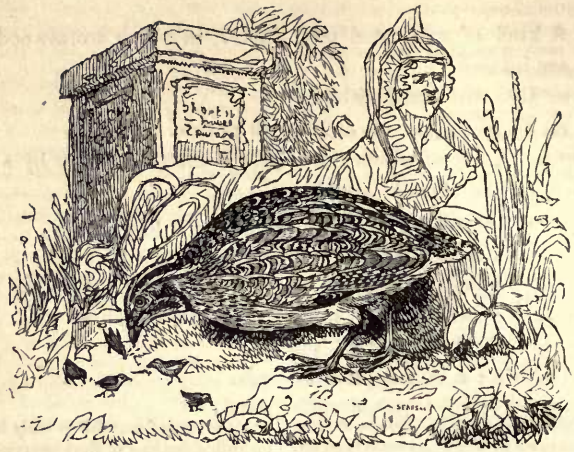
If the dealer turn up any of his adversary's cards in dealing another deal may be demanded; but if he turn up his own he is to abide by it. Should a faced card occur, the pack must be shuffled and dealt again. When more cards than necessary are given to the non-dealer, he may either claim a fresh deal, or have the extra cards drawn; but should the dealer give himself too many, then his opponent is entitled to a point, and may either have another deal, or draw the supernumerary cards. Bystanders ought never to interfere, under penalty of paying the stakes. Either party saying, I put, must abide the event of the game, or pay the stakes.—*Hoyle.*

Putrefaction, *s.* The state of growing rotten; the act of making rotten.

Puttock, *s.* A buzzard.

Puzzle, *v.* To perplex, to confound, to embarrass, to entangle.

Pyrotechny, *s.* The art of managing fire; the art of making fireworks.



THE QUAIL.

QUACK, *v.* To cry like a duck; to act the part of a boasting pretender to physic, or any other art.

QUADRANGULAR, *a.* Square, having four right angles.

QUADRILLE, *s.* A game at cards.

The game of quadrille is played by four persons, with forty cards; the four tens, nines, and eights, are discarded from the pack; the deal is made by distributing the cards to each player, three at a time, for two rounds, and once four to each, beginning with the right-hand player, who is the elder hand.

The stakes, consisting of several equal billets or contracts, comprising the counters and fish, are distributed among the players, who agree upon the value thereof, and upon the number of tours, which are usually ten. After the trump is named, the right-hand player leads, and should the ombre, either alone or with a friend, win all the tricks, he gains the vole, or, if six tricks, the game; but if he get only five tricks he loses by remise, and if only four, by codill. The game, consolation, matadores, bastos, and other payments, are variously regulated, according as the game is won or lost. The holder of either or both of the red aces, is entitled to a fish for each.

SOME SHORT RULES FOR LEARNERS.

1. When you are the ombre, and your friend leads from a mat, play your best trump, and then lead the next best the first opportunity.

2. If you possess all the trumps, keep leading them, except you have other certain winning cards.

3. If all the mats should not be revealed by the time you have won six tricks, do not risk playing for the vole.

4. When you are the friend called, and hold only a mat, lead it, but if only a mat, guarded by a small trump, lead the small one; though when the ombre is last player, lead the best trump you have.

5. Punto in red, or king of trumps in black, are good cards to lead when they are your best, and should either of them succeed, then play a small trump.

6. When the ombre leads to discover the friend, if you hold king, queen, and knave, put on the knave.

7. Preserve the called suit, whether friend or foe.

8. When playing against a lone hand,

never lead a king, unless you have the queen, nor change the suit, nor permit, if possible to prevent it, the ombre to be last player.

9. Call on the strongest suits, except you have a queen guarded, and, if elder hand, you have a better chance than when middle hand.

10. A good player may succeed better with a weaker hand, when either elder or younger, than if middle hand.

THE RANK OF THE CARDS WHEN NOT TRUMPS.

CLUBS AND SPADES.	HEARTS AND DIAMONDS.
King,	King,
Queen,	Queen,
Knave,	Knave,
Seven,	Ace,
Six,	Deuce,
Five,	Three,
Four,	Four,
Three,	Five,
Deuce.	Six,
	Seven.
In all 9.	In all 10.

THE RANK AND ORDER OF THE TRUMPS.

CLUBS AND SPADES.	HEARTS AND DIAMONDS.
Spadille, the ace of spades.	Spadille, the ace of spades.
Manille, the deuce of spades or of clubs.	Manille, the seven of hearts or diamonds.
Basto, the ace of clubs.	Basto, the ace of clubs.
	Punto, the ace of hearts or diamonds.
King,	King,
Queen,	Queen,
Knave,	Knave,
Seven,	Deuce,
Six,	Three,
Five,	Four,
Four,	Five,
Three.	Six.
In all 11.	In all 12.

N. B. Spadille and basto are always trumps, by which the red suits have one trump more than the black.

There are three matadores, viz.—spadille, manille, and basto, which force all inferior trumps; but if an ordinary trump be led, you are not obliged to play a matadore; though, if spadille be led, and you hold manille or basto unguarded, you must play it; also, if manille be led, and you have basto unguarded, that must be played.

1. The first thing, after seeing the cards, is to ask leave; to pass; or play *sans prendre;* and if you name a wrong trump you must abide by it.

2. If all the players pass, he who holds spadille is obliged to play what is called forced spadille; but though he should not make three tricks, he is not basted.

3. The player who calls a king, ought to have a fair probability of winning three tricks, to prevent being basted.

4. Therefore, such games only are set down as give a fair chance to win by calling a king, with directions at the end of each what to lead.—*Hoyle.*

QUADRUPED, *s.* An animal that goes on four legs, as, perhaps, all beasts.

QUADRUPLE, *a.* Fourfold, four times told.

QUAGMIRE, *s.* A shaking marsh.

QUAIL, (*Tetrao Coturnix*, LINN.; *Le Caille*, BUFF.) *s.* A bird of game.

The length of the quail is seven inches and a half. Bill dusky; eyes hazel; the colours of the head, neck, and back, are of a mixture of brown, ash-colour, and black; over each eye there is a yellow streak, and another of the same colour down the middle of the forehead; a dark line passes from each corner of the bill, forming a kind of forget above the breast; the scapular feathers are marked by a light yellowish streak down the middle of each; the quills are of a lightish brown, with small rust-coloured bands on the exterior of the feathers; the breast is of a pale rust-colour, spotted with black, and streaked with pale yellow; the tail consists of twelve feathers, barred like the wings; the belly and thighs are of a yellowish white; the legs pale brown. The female wants the black spots on the breast, and is easily distinguished by a less vivid plumage.

Quails are almost universally diffused throughout Europe, Asia, and Africa; they are birds of passage, and are seen in immense flocks traversing the Mediterranean Sea, from Europe to the shores of Africa, in the autumn, and returning again in the spring, frequently alighting, in their passage, on many of the islands of the Archipelago, which they almost cover with their numbers. On the western coasts of the kingdom of Naples, such prodigious numbers have appeared, that an hundred thousand have been taken in a day, within the space of four or five miles. From these circumstances it appears highly probable that the quails which supplied the Israelites with food, during their journey through the wilderness, were sent thither on their passage to the north, by a wind from the south-west, sweeping over Egypt and Ethiopia, towards the shores of the Red Sea.

Quails are not very numerous here; they breed with us, and many of them are said to remain throughout the year, changing their quarters from the interior counties to the sea coast. The female makes her nest like the partridge, and lays to the number of six or seven eggs of a greyish colour, speckled with brown. The young birds follow the mother as soon as hatched, but do not continue long together: they are scarcely grown up before they separate; or, if kept together, they fight obstinately with each other, their quarrels frequently terminating in each others' destruction. From this quarrelsome disposition in the quail, it was that they were formerly made use of by the Greeks and Romans, as we use game-cocks, for the purpose of fighting. We are told that Augustus punished a præfect of Egypt with death, for bringing to his table one of these birds, which had acquired celebrity by its victories. At this time the Chinese are much addicted to fighting quails: in some parts of Italy it is likewise said to be no uncommon practice. After feeding two quails very highly, they place them opposite to each other, and throw a few grains of seed between them; the birds rush upon each other with the utmost fury, striking with their bills and heels till one of them yields.

* * *

In our way down to the beach, we observed a number of high poles erected at small distances in the low grounds. These the lad told us served to stretch their nets upon in the quail season. Capri has in all ages been celebrated for the prodigious number of quails caught there. The principal revenues of the bishop and of some convents, arise from the quails they send to Naples. In a good season, which lasts about three weeks only, 150,000, and in one day 12,000 have been taken. As birds of passage, they alight here merely to rest themselves in their flight to other countries; begin arriving in April, and continue till the middle of May. That period is a time of profit and rejoicing for the Capreans, every one being at liberty to shoot or catch as many as he can. Exhausted as the bird is, there is little difficulty in seizing him. The most common and productive method is, for one man to have a net, which he carries folded up on two poles, another drives the quails towards him, when the former instantly expands his net, and as soon as the birds strike against it, he turns the net with great dexterity, and confines them entangled as they are. They are then put into a bag, to preserve them alive, because the live ones fetch a double price at Naples. Very often, however, this pastime is attended with serious consequences; the bearer of the net, in twisting it round, frequently loses his balance, from the weight of the long poles, and is precipitated from the rocks. Even boys from the age of four amuse themselves by catching them with the hand in the bushes, and putting them under the netting which they constantly wear on their heads; and on their return home, the height of this *animated* head dress, as it affords the best proof of their success, is a matter of triumph among them. In Egypt, when these birds arrive in the month of September, I have more than once seen the Arabs killing and laming them, by throwing short sticks at them. During the time that the Capitani Bey blockaded the harbour of Alexandria with his Turkish squadron, one of the Greek sailors of his ship had caught two or three which had perched on the rigging. The mussulman rewarded him generously, and desirous of varying the hard fare which a blockading squadron has usually to sustain, by a more ample supply of such a delicate rarity, promised a piastre for every quail that should be brought him. In a few days the rigging, sails, and yards were covered with flocks of quails; great numbers were caught of course, and every one was brought into the cabin, as the price had been so liberally fixed. To escape the dilemma of either ruining his purse or breaking his promise, the Capitani Bey resorted to the alternative of standing out to sea, as by removing from the coast he got rid of the visits of these expensive strangers.

* * *

In January, 1806, Lord Fitzharris was returning from shooting, when close to the sea his dogs pointed, and he shot a quail; in the same field he killed a brace more, these consisted of a male, female, and young bird; they were fat and in exceeding good condition, and it was conjectured that the old birds had been disabled from pursuing their autumnal migration. A similar incident not having occurred to any sportsman, in that part of England, in some measure accounts for Mr. Pennant's remark (which he made for its singularity), of a quail being shot in Kent, during the winter of 1781.—*Bewick—Daniel—Letters from the Campagna Felice.*

QUAILPIPE, *s.* A pipe with which fowlers allure quails.

QUARRY, *s.* A square; game flown at by a hawk; a stone mine, a place where they dig stones; the ancient term for game, both winged and quadruped.

QUARRY, *v.* To prey upon; to dig out stones.

QUART, *s.* The fourth part, a quarter; the fourth part of a gallon; the vessel in which strong drink is commonly retailed.

QUARTAN, *s.* The fourth-day ague.

QUARTER, *s.* A fourth part; a region of the skies, as referred to the seaman's card.

QUARTER, *v.* To divide into four parts; to divide, to break by force; to divide into distinct regions; to traverse back and forward carefully as a pointer quarters a field.

QUASSIA, *s.* A powerful bitter, useful in weakness of the stomach.

QUICK, *s.* The living flesh; sensible parts; plants of hawthorn.

QUICKSILVER, *s.* The vulgar name for mercury.

QUILL, *s.* The hard and strong feather of the wing, of which pens are made; prick or dart of a porcupine; wing feathers of birds generally.

QUINARY, *a.* Consisting of five.

QUINT, *s.* A set of five; sequents of five; a term at cards, pronounced *kent.*

QUINZE, *s.* A game at cards.

Quinze is a French game, usually played by two persons only, admired for its simplicity and fairness, depending entirely upon chance, being soon decided, and not requiring the attention of most other games on the cards, and therefore calculated for those who love to sport upon an equal hazard.

It is called quinze from fifteen being the game, made in the following manner:—first, the cards must be shuffled by the player, and when they have cut for deal, which belongs to him who cuts the lowest, they may be shuffled again, the dealer having the privilege to shuffle last: this being done, the adversary cuts, after which the dealer gives one card to his adversary and one to himself; if the adversary do not like his card, he has a right to have as many more given to him, one after the other, the pips of which will make 15, or come nearest to it, which are usually given from the top of the pack; for example, if he should have a deuce, and draw a five, which make seven, he should go on, in hopes of coming nearer to 15; if he then draw an eight, which makes just 15, and be elder-hand, he is sure of winning the game: but should he over-draw, and make above 15, he loses, unless the dealer does the same, in which case it is a drawn game, and they double the stakes; and thus go on till one of them has won the game by standing, and being 15, or the nearest to it, below that number, &c. At the end of each game, the cards are put up and shuffled, and the players cut anew for the deal, the elder hand constantly having the advantage.—*Hoyle.*

QUITTERBONE, *s.* A hard round swelling upon the coronet, between the heel and the quarter.

QUITTER, *s.* A disease of the hoof. *Vide* APPENDIX.

QUIVER, *s.* A case for arrows. QUIVERED, *a.* Furnished with a quiver.

QUOIT, *s.* Something thrown to a great distance, to a certain point; the discus of the ancients is sometimes called in English quoit, but improperly. QUOIT, *v.* To throw quoits, to play at quoits.

QUOTIDIAN, *a.* Daily, happening every day.

THE RABBIT.

RABATE, *v.* In falconry, to recover a hawk to the fist again.

RABBET, *s.* A joint made by paring two pieces, so that they wrap over one another.

RABBIT, *s.* A furry animal that lives on plants, and burrows in the ground.

Rabbit-keeping is practised by a few individuals in almost every town, and by a few in almost every part of the country; but thirty or forty years ago, there were one or two very considerable feeders near the metropolis, keeping each, according to report, from fifteen hundred to two thousand breeding does. These large concerns have ceased, it seems, long since, and London receives the supply of tame as well as wild rabbits, chiefly from the country.

The only considerable rabbit-feeders of whom I heard, some years since, were two gentlemen, the one resident in Oxfordshire, the other in Berks. The former fed some hundreds, and then, it was said, intended to double his stock. The huts were placed in a small building set apart for that purpose. The then stock produced one load of dung per week, two loads of which were sufficient to manure an acre of land. Three dozen of rabbits per week were sent to the London market, but keep and attendance reckoned, no other profit accrued, excepting the dung, the price of which used to be eight-pence per bushel, and I believe thirty-six bushels are reckoned a load. The Berks gentleman, according to the survey of that county, fed white rabbits, on account of the superior value of their skins, from their application of late years to the purpose of trimmings. Twenty does and two bucks were my largest stock.

* * *

The rabbit-house should stand upon a dry foundation, and be well ventilated. Exposure to too much humidity, whether externally or internally, is fatal to rabbits, which are liable to the rot like sheep, and from the same causes. The rains of 1799, which continued nearly four months, destroyed my stock of rabbits, which were hutted in a boarded shed, not well defended from the cold and moist air. Ventilation and fresh air are also necessary, where considerable numbers of these animals are kept, which will not else remain healthy, or prosper for any length of time: and even sudden mortality may ensue, from impure and stagnant air. A thorough draught or passage for the air is thence indispensable, and should be contrived in the building, with the convenience of shutting such opposite windows or doors in cold and wet weather.

The huts or hutches are generally placed

one above another, to the height required by the number of rabbits, and the extent of the room. Where a large stock is kept, to make the most of room, the hutches may be placed in rows, with a sufficient interval between, for feeding and cleaning, instead of being joined to the wall, in the usual way. It is prefcrable to rest the hutches upon stands, about a foot above the ground, for the convenience of cleaning under them. Each of the hutches, intended for breeding, should have two rooms, a feeding and a bed-room. Those are single for the use of the weaned rabbits, or for the bucks, which are always kept separate.

When much green meat is given, rabbits make a considerable quantity of urine, and I have sometimes seen occasion to set the hutches sloping backwards a few degrees, a very small aperture being made the whole length of the floor, to carry off the urine. A sliding door in the partition between the two rooms, is convenient for confining the rabbits during the operation of cleaning; which, indeed, is a good argument for having all the hutches double, it being more troublesome to clean out a room with a number of rabbits in it, than with only one. It must not be forgotten, that the teeth of rabbits are very effectual implements of destruction to any thing not hard enough to resist them, and their troughs should be bound with something less penetrable than wood. As they are apt to scratch out their food, and dung in it, I have often thought it might be useful to adopt the feeding troughs with moveable boards, as well for rabbits as hogs.

The floor of the hutches should be planed smooth, that wet may run off, and a common hoe with a short handle, and a short broom, are most convenient implements for cleaning these houses. The object being to obtain the dung pure, for sale, no litter should be allowed; but on a farm where the dung is expended at home, the hutches should be littered with refuse hay or straw, perfectly dry. The rabbit-house to contain a tub for the dung, and a bin for a day's supply of hay, corn, roots, or other food, which should be given in as fresh a state as possible. * * *

As to the varieties of form and colour, in the rabbit, the short-legged, with width and substance of loin, generally few in number, and to be obtained only by selection, are the most hardy, and fatten most expeditiously, taking on fat both internally and in the muscular flesh. They have, besides, the soundest livers—the rabbits being generally subject to defects, of the liver: they are the smallest variety. There is a very large variety of the hare colour, having much bone, length and depth of carcase, large and long ears, with large eyes, resembling those of the hare. They might well be taken for hybrid or mules, but from the objection of their breeding. Their flesh is high coloured, substantial, and more savoury than that of the common rabbit; and they make a good dish, cooked like the hare, which, at six or eight months old, they nearly equal in size. The large white, and yellow and white species, have whiter and more delicate flesh, and, cooked in the same way, will rival the turkey.

With respect to colour, I have always preferred the wild colour, and black, finding the skins of full as much worth as the white. The Turkish or French rabbit, with long white fur, differs little from the common varieties; nor did I find their skins of more value, either for sale or home use. I have been in the habit of drying the skins, for linings of night-gowns, and other domestic purposes; but have always found reason to prefer the short, close fur. The large above-mentioned—indeed any peculiar varieties—must be sought among the London dealers.

Of late years, in London, the term *smut*, has been applied as a mark of distinction in the rabbit. Thus, there are single and double smuts. The smut consists of a black spot on the side of the rabbit's nose: when there are two black spots, one on each side of the nose, it constitutes a double smut. Generally, the rabbits are prized for the number of these black spots upon the head and body, and for the fineness and length and size of the ears, which occasions their falling about the head, in a manner different from the common rabbit. Black and tortoise-shell are the favourite colours. * * *

Rabbits are divided into four kinds—*warreners*, *parkers*, *hedgehogs*, and *sweethearts*. Burrowing under ground is favourable, it appears, to the growth of fur; and the warrener, though a member of a subterraneous city, is less effeminate than his kindred who roam more at large. His fur is most esteemed, and after him comes the parker, whose favourite haunt is a gentleman's pleasure-ground, where he usually breeds in great numbers, and not unfrequently drives the hares away. The hedgehog is a sort of vagabond rabbit, that travels, tinker-like, throughout the country, and would be better clad if he remained more at home. Sweethearts are tame rabbits, and their fur, though sleek, is too silky and soft to be of much use in the important branch of hat-making.

Breeding.—The doe will breed at the age of six months, and her period of gestation is thirty or thirty-one days. It should be premised, that the buck and doe are by no means to be left together; but their union having been successful, the buck must be immediately withdrawn, and the doe tried again in three days: in fact, with rabbits, this business is conducted on the same principle as in the stud. Like chickens, the best breeding rabbits are

those kindled in March. Some days before parturition, or kindling, hay is to be given to the doe, to assist in making her bed, with the flue, which nature has instructed her to tear from her body for that purpose. She will be at this period seen sitting upon her haunches, and tearing off the flue, and the hay being presented to her, she will, with her teeth, reduce and shorten it to her purpose.—Biting down of the litter or bed, is the first sign of approaching pregnancy. The number produced, generally between five and ten; and it is most advantageous always to destroy the weak or sickly ones, as soon as their defects can be perceived, because five healthy and well-grown rabbits are worth more than double the number of an opposite description, and the doe will be far less exhausted. She will admit the buck again with profit at the end of six weeks, when the young may be separated from her and weaned. Or the young may be suckled two months, the doe taking the buck at the end of five weeks, so that the former litter will leave her about a week before her next parturition.

A notion was formerly prevalent, of the necessity for giving the buck immediately after the doe had brought forth, lest she should pine, and that no time might be lost; and if it were intended that no time might be lost in destroying the doe, such, indeed, would be the most successful method. Great care should be taken that the doe, during her gestation, be not approached by the buck, or indeed by any other rabbit; as, from being harassed about, she will almost certainly cast her young. One doe in a thousand may devour her young; a sign that she ought to be otherwise disposed of. Some does admit the buck with difficulty, although often apparently in season; such should be immediately fattened off, since it can never be worth while to keep an objectionable individual for breeding, of a stock to be produced in such multitudes. Should the doe be weak on her bringing forth, from cold caught or other cause, she will drink beer-caudle, as well as any other lady; or warm fresh grains will comfort her; a malt mash; scalded fine pollard, or barley-meal, in which may be mixed a small quantity of cordial horse-ball.

Feeding.—Upon a regular plan, and with sufficient attendance, it is better to feed three times than twice a day. The art of feeding rabbits with safety and advantage is, always to give the upper-hand to dry and substantial food. Their nature is congenial with that of the sheep, and the same kind of food, with little variation, agrees with both. All weeds, and the refuse of vegetation, should be banished from rabbit feeding. Such articles are too washy and diuretic, and can never be worth attention, whilst the more solid and nutritious productions of the field may be obtained in such plenty, and will return so much greater profit. Rabbits may, indeed, be kept, and even fattened upon roots, good green meat, and hay; but they will pay for corn; and this may be taken as a general rule. Rabbits which have as much corn as they will eat, can never take any harm from being indulged with almost an equal portion of good substantial vegetables. However, the test of health is, that their dung be not too moist. Many, or most, of the town feeders never allow any greens at all; the reason, I suppose, because they feed almost entirely on grains. The corn proper for rabbits:—oats, peas, wheat; pollard, and some give buck-wheat, The greens and roots, the same as our cattle crops, namely carrots, Jerusalem artichokes, and if potatoes, baked or steamed. Lucerne, cabbage-leaves, clover, tares, furze. I have had them hoven, from eating rape; and not improbably, mangold might have a similar effect. Clover and meadow-hay, pea and bean straw.

Rabbits are generally sold from the teat, but there is also a demand for those of larger size, which may be fattened upon corn and hay, with an allowance of the best vegetables. The better the food, the greater weight, better quality, and more profit, which I apprehend to be generally the case in the breeding of all animals. Some fatten with fresh grains and pollard. I have tried all wheat, and all potato oats, comparatively; but could find no difference in the goodness of the flesh. The rabbit's flesh being dry, the allowance of succulent greens may tend to render it more juicy; and I suppose the old complaint of the dryness of the flesh in Devon beef, entirely fed by hay, might be remedied in the same way. Rabbits are in perfection for feeding at the fourth or sixth month; beyond which period their flesh becomes more dry, and somewhat hard. It requires three months, or nearly so, to make a rabbit thoroughly fat and ripe; half the time may make them eatable, but by no means equal in the quality of the flesh. They may yet be over fattened, as appears by specimens exhibited a few years since, at Lord Somerville's show, which were loaded with fat, without and within, like the best feeding sheep; and at the late London cattle show, two were exhibited, one of them exceeding the weight of fifteen pounds.

Castrated rabbits might be fattened, no doubt, to the weight of upwards of ten, or even fifteen pounds, at six or seven months old. The operation should be performed at the age of six or seven weeks. I have not succeeded in castrating the rabbit, but am informed it is successfully practised in the land of capons, namely, Sussex, near Chichester,

where on the average, not one in three hundred is lost by the operation, which is performed at five or six weeks old.

* * *

In slaughtering full-grown rabbits, after the usual stroke upon the neck, the throat should be perforated upwards, towards the jaws, with a small-pointed knife, in order that the blood may be evacuated, which would otherwise settle in the head and neck. It is an abomination to kill poultry by the slow and torturing method of bleeding to death, hung up by the heels, the veins of the mouth being cut; but still more so the rabbit, which in that situation utters horrible screams. The entrails of the rabbit, whilst fresh, are said to be good food for fish, being thrown into ponds.

* * *

By 7 & 8 Geo. IV. if any person unlawfully and wilfully, in the night time, take any hare or coney, in any warren or ground lawfully used for the keeping thereof, whether enclosed or not, every such person shall be guilty of a misdemeanour; and persons guilty of the same offence in the day time, or using any snare or engine, are subject to a penalty of five pounds. But this does not extend to the taking, in the day time, any conies on any sea bank or river bank in Lincolnshire, so far as the tide shall extend, or within a furlong of such bank. * * *

Ampthill Rabbit Bazaar.—I have stated at the commencement of this article, that the large concerns had generally ceased. Of late, one has arisen at Ampthill, Beds; upon a more extensive scale than ever before attempted, established by J. H. Fisher, Esq., an agent of his Grace the Duke of Bedford. Upon so extensive a plan, indeed, is this new undertaking, that it may well be styled our grand National Rabbit Bazaar. The building, situated upon an eminence, is square, somewhat resembling barracks, with a court withinside the walls, and with thirty acres of fine light land adjoining, under culture of those crops known to be best adapted to the nourishment and support of rabbit-stock. It was proposed to keep between four and five thousand breeding does, which number is probably now complete. The young rabbits, from seven to nine weeks old, are sent to Newgate and Leadenhall markets, fifty to sixty dozens, weekly. The quantity of dung produced, which is reserved with the utmost care, and free from any extraneous substances, must be very considerable. A number of men and boys are employed in the concern, under the direction of an experienced foreman, and the utmost regularity of attention observed with respect to management, feeding, and cleanliness.

This bazaar has been honoured by the visits of persons of the highest rank; of his Royal Highness the Duke of Clarence, his Grace the Duke of Bedford, Lord Holland, Lord Vernon, and a number of ladies and gentlemen. * * *

The wold warreners catch their rabbits with fold-nets, with spring-nets, and with "tipes," a species of trap.

The fold-nets are set about midnight, between the burrows and the feeding grounds; the rabbits being driven in with dogs, and kept inclosed in the fold until morning.

The spring-net is generally laid round a hay-stack, or other object of inducement for rabbits to collect in numbers.

The tipe or trap is a more modern invention; it consists of a large pit or cistern, covered with a floor, with a small trap door nicely balanced, near its meuse. It used to be set by a hay-stack, but since turnips are now grown for the winter food, in an inclosure within the warren, the trap is placed within the wall of this inclosure. For a night or two the rabbits are suffered to go through the meuse, and over the trap, that they may be familiarised to where the turnips are grown, after that the trap-door is unbarred, and the number wanted are taken. In emptying the cistern, the rabbits are culled, the fat ones are slaughtered, and the others turned upon the turnips to improve.

* * *

In shooting a rabbit, always consider the foremost half of him as your target, or he will probably be shot in a slovenly manner; and if there is an earth near, most likely scramble to it, and make his escape.—*Moubray*—*Daniel.*

Rabid, *a.* Fierce, furious, mad.

Race, *s.* A generation, a collective family; a particular breed; contest in running; course on the feet; progress, course.

Racing, *v.* A contest of speed, in which horses are commonly employed.

It is believed that horse-racing was known and practised by the Anglo-Saxons, but most probably confined to persons of rank and opulence, and followed only for amusement sake.

The first indication, however, of a sport of this kind occurs in the description of London, written by Fitzstephen, who lived in the reign of Henry II. He tells us, that horses were usually exposed for sale in West Smithfield; and, in order to prove the excellency of the most valuable hackneys and charging steeds, they were matched against each other; his words

are to this effect—"When a race is to be run by this sort of horses, and perhaps by others, which also in their kind are strong and fleet, a shout is immediately raised, and the common horses are ordered to withdraw out of the way. Three jockeys, or sometimes only two, as the match is made, prepare themselves for the contest; such as being used to ride know how to manage their horses with judgment: the grand point is, to prevent a competitor from getting before them. The horses, on their part, are not without emulation, they tremble and are impatient, and are continually in motion: at last the signal once given, they strike, devour the course, hurrying along with unremitting velocity. The jockeys, inspired with the thoughts of applause and the hopes of victory, clap spurs to their willing horses, brandish their whips, and cheer them with their cries."

In the middle ages there were certain seasons of the year when the nobility indulged themselves in running their horses, and especially in the Easter and Whitsuntide holidays.

It is certain, that horse-races were held upon various holidays, at different parts of the kingdom, and in preference to other pastimes. "It had been customary," says a Chester antiquary, "time out of mind, upon Shrove Tuesday, for the company of sadlers belonging to the city of Chester, to present to the drapers a wooden ball, embellished with flowers, and placed upon the point of a lance; this ceremony was performed in the presence of the mayor, at the cross in the 'Rodhee,' or Roody, an open place near the city; but this year," continues he, "the ball was changed into a bell of silver, valued at three shillings and sixpence, or more, to be given to him who shall run the best, and the farthest on horseback, before them upon the same day."

Here we see the commencement of a regular horse-race, but whether the courses were in immediate succession, or at different intervals, is not perfectly clear; we find not, however, the least indication of distance posts, weighing the riders, loading them with weights, and many other niceties that are observed in the present day.

Races something similar to those above mentioned, are described by Butcher, as practised in the vicinity of the town of Stamford, in Lincolnshire. "A concourse," says he, "of noblemen and gentlemen meet together, in mirth, peace, and amity, for the exercise of their swift running-horses, every Thursday in March. The prize they run for is a silver and gilt cup, with a cover, to the value of seven or eight pounds, provided by the care of the alderman for the time being; but the money is raised out of the interest of a stock formerly made up by the nobility and gentry, which are neighbours and well-wishers to the town."

Running horses are frequently mentioned in the registers of the royal expenditures. It is notorious, that king John was so fond of swift horses and dogs for the chase, that he received many of his fines in the one or the other; but at the same time it does not appear that he used the horses for any purposes of pleasure, beyond the pursuits of hunting, hawking, and such like sports of the field.

In the reign of Edward III. the running-horses purchased for the king's service, were generally estimated at twenty marks, or thirteen pounds six shillings, and eightpence each; but some few of them were prized as high as twenty-five marks. An entry appears, dated the ninth year of this king's reign, which states, that the king of Navarre sent him as a present two running-horses, which I presume were very valuable, because he gave the person who brought them no less than one hundred shillings for his reward.

In the reign of James I. public races were established in many parts of the kingdom; and it is said that the discipline and modes of preparing the horses upon such occasions were much the same as are practised in the present day. The races were then called bell courses, because, as we have seen above, the prize was a silver bell.

At the latter end of the reign of Charles I. races were held in Hyde Park, and at Newmarket. After the restoration, horse-racing was revived and much encouraged by Charles II., who frequently honoured this pastime with his presence; and, for his own amusement, when he resided at Windsor, appointed races to be made in Datchet mead. At Newmarket, where it is said he entered horses and run them in his name, he established a house for his better accommodation; and he also occasionally visited other places where horse-races were instituted.

About this time it seems, that the bells were converted into cups, or bowls, or some other pieces of plate, which were usually valued at one hundred guineas each; and upon these trophies of victory the exploits and pedigree of the successful horses were most commonly engraved. William III. was also a patroniser of this pastime, and established an academy for riding; and his queen not only continued the bounty of her predecessors, but added several plates to the former donations. George I. instead of a piece of plate, gave a hundred guineas, to be paid in specie.

* * *

RULES OF RACING.

Horses take their ages from May-Day; that is, a horse foaled any time in the year 1828, will be deemed a year old on the 1st of May, 1829.

Four inches are a hand. Fourteen pounds are a stone.

Catch weights are, each party to appoint any person to ride without weighing.

A post match, is to insert the age of the horses in the article, and to run any horse of that age, without declaring what horse, till he come to the post to start.

A Handicap Match, is A, B, and C, to put an equal sum each into a hat; C, who is the handicapper, makes a match for A and B, who, when they have perused it, put their hands into their pockets, and draw them out closed; then they open them together, and if both have money in their hands, the match is confirmed; if neither have money, it is no match. In both cases, the handicapper draws all the money out of the hat; but if one has money in his hand, and the other none, then it is no match; and he that has money in his hand is entitled to the deposit in the hat.

Free Handicap is an expression which frequently appears in race lists, the meaning of which is, that a number of horses being named, a weight is placed against the name of each, by the clerk of the races, or some disinterested person, who is well acquainted with the performances of the horses. These weights are supposed to be such as will bring all the horses as nearly on a par as possible; and the list containing them being handed to the owners of each horse, they accept or decline according as they imagine the chances are for or against them.

Horses not entitled to start without producing a proper certificate of their age, if required, at the time appointed in the articles, except where aged horses are included, and in that case a junior horse may enter without a certificate as to age, provided he carry the same weight as the aged.

No person shall start more than one horse of which he is the owner, either wholly or in part, and either in his own name or in that of any other person, for any race for which heats are run.

The horse that has his head at the ending-post first, wins the heat.

For the best of the plate where three heats are run, the horse is second that wins one heat.

For the best of heats, the horse is second that beats the other horse twice out of three times, though he does not win a heat.

Where a plate is won by two heats, the preference of the horses is determined by the places they get in the second heat.

Where a plate or subscription is given for the winner of the best of three heats, a horse, to win the prize, must be the actual winner of two heats, even though no horse appear against him for both or either of the heats.

When three horses have each won a heat, they only must start for a fourth, and the preference amongst them will be determined by it, there being before no difference amongst them.

In running of heats, if it cannot be decided which horse is first, the heat goes for nothing, and they may all start again, except it be between two horses that had each won a heat.

If a rider fall from his horse, and the horse be rode in by a person who is sufficient weight, he shall take his place the same as if his rider had not fallen, provided he go back to the place where the rider fell.

Jockeys must ride their horses to the usual place for weighing the riders, and he that dismounts before, or wants weight, is distanced; unless he be disabled by an accident which should render him incapable of riding back, in which case he may be led or carried to the scale.

Horses' plates or shoes not allowed in the weight.

Horses running on the wrong side of a post, and not turning back, are distanced.

Horses drawn before the plate is won are distanced.

Horses are distanced if their riders cross or jostle.

All complaints of foul riding must be made before or at the time the jockey is weighed.

No distance in a fourth heat.

A confirmed bet cannot be off but by mutual consent, except in the case hereinafter mentioned.

Either of the betters may demand stakes to be made, and on refusal declare the bet to be void.

If a better be absent on the day of running, a public declaration of the bet may be made on the course, and a demand whether any person will make stakes for the absent party, and if no person consent to do so, the bet may be declared void.

Bets agreed to be paid or received in London, or any other specified place, cannot be declared off on the course.

If a match or sweepstakes be made for any specified day in any race-week, and the parties agree to change the day to any other in the same week, all bets must stand; but if the parties agree to run the race in a different week, all bets made before the alteration shall be void.

The person who lays the odds has a right to choose a horse or the field; when a person has chosen a horse, the field is what starts against him; but there is no field without one horse starts against him.

Bets and stakes made in guineas are paid in sovereigns.

If odds are laid without mentioning the horse before the race is over, the bet must be determined by the state of the odds at the time of making it.

Bets made in running are not determined till the plate is won, if that heat be not mentioned at the time of running.

A bet made after the heat is over, if the horse betted on does not start, is void.

Bets determined, though the horse does not start, when the words "play or pay," are made use of in betting.

Where two horses run a dead heat for a sweepstakes or plate, and the parties agree to divide the stakes equally, all bets between those two horses, or between either of them, and the field, must be settled by the money betted being put together and divided equally between the parties. If, after the dead heat, an equal division of the stakes be agreed upon, then the money betted shall be put together, and be divided between the parties in the same proportion as the stakes shall have been divided. If a bet be made on one of the horses that run the dead heat against a horse that was beaten in the race, he who backed the horse that ran the dead heat wins half his bet. If the dead heat be the first event of a double bet, the bet shall be void.

Bets made on horses winning any number of races within the year shall be understood, however the expression may be varied, as meaning the year of our Lord.

Money given to have a bet laid shall not be returned, though the race be not run.

Matches and bets are void on the decease of either party before the match or bet is determined.

A horse walking over or receiving forfeit shall not be deemed a winner.

An untried stallion or mare is one whose produce has never run in public.

A maiden horse or mare is one that has never won.

Feather Weight.—A horse carries feather weight, when the terms of the race allow the owner to place what rider he pleases on his back: he consequently procures the lightest eligible jockey possible, who weighs neither before nor after the race.

Give and take plates, are weights for inches: twelve hands to carry a stated weight, all above to carry extra, in the proportion of seven pounds to an inch.—*Strutt—Turf Expositor.*

Racecourse, *s.* Ground over which a race is run. The principal are—

Ascot Heath. A circular course, exactly two miles, the last mile of which forms the Old Mile. The New Mile is straight, rising all the way, and measures 7 fur. 150 yds. The T. Y. C. (part of the New Mile) is 3 fur. 95 yds.

Buxton. A circular course of one mile.

Chelmsford. An oval course, thirty yards short of two miles; but by starting between the distance post and the winning chair, it becomes two complete miles.

Chester. A circular course of one mile. It is a complete flat, and perhaps the pleasantest course in England for spectators.

Doncaster. A circular course of 1 mile, 7 fur. 70 yds. The other courses are formed of portions of this circle, namely, Red House Inn, 5 fur. 164 yds. T. Y. C. 7 fur. 189 yds. Fitzwilliam Course, 1 mile, 4 fur. 10 yds. St. Leger Course, 1 mile, 6 fur. 132 yds. Two Mile Course, 2 miles, 25 yds. Four Mile Course, (twice round) 3 miles, 7 fur. 219 yds.

Egham. A flat oval course, 66 yds. short of 2 miles.

Epsom. Two miles, the last mile and a half of which is the Derby and Oaks Course. The Craven Course is one mile and a quarter of the same ground. Epsom Course can be properly called neither circular, oval, nor triangular.—It is altogether one of the worst courses in England.

Knutsford. A flat circular course of one mile.

Lancaster. A circular mile course, and good turf.

Leeds. A circular course of 1 mile, 2 fur. 48 yds. There is also a straight course, through the centre of the circular one, of 2 fur. 158 yds., which, uniting with each half of the circle, forms two other courses, in the form of a sector, the one 1 mile, 11 yds., the other 1 mile, 135 yds.

Liverpool. The Old Course is an oval mile, flat, and very good turf. The New Course is one mile and a half, forming an ill-defined oblong square; and though nearly flat, is a very distressing course for horses. It is a new establishment, races were held upon it this year (1829) for the first time. The form is bad—it is too elongated, and in consequence causes the horses, for a great part of the length, to be too far distant. The Old and the New Course are situated at the distance of two miles asunder.

Manchester. An oval course of 7 fur. 184 yds. The Cup Course is 2 miles, 168 yds. The T. Y. C. 5 fur. 184 yds. There is a hill, and the course is by no means of the best description.

Newcastle. A sort of square of 1 mile, 6 fur. 132 yds.

Newton. A triangular course of one mile.

Nottingham. A circular course of 1 mile, 2 fur. and 11 yds.

Oxford. Flat, oval course, 2 miles all but a distance.

Pontefract. An oval course, formed on

the gentle declivity of rising ground, 2 miles, 1 fur.

Preston. An indifferent oval course, one mile.

Stockbridge. An oval course, rather hilly, the last three quarters of a mile in a straight line. There is one straight mile, and also a circular course of about one mile and a quarter; the latter is called the New Course.

York. T. Y. C. 5 fur. 59 yds. Mile Course, 1 mile, 8 yds. Last mile and quarter, 1 mile, 2 fur., 15 yds. Last mile and half, 1 mile, 4 fur., 18 yds. Last mile and three quarters, 1 mile, 5 fur., 160 yds. Two-mile Course, 1 mile, 7 fur., 85 yds. Four-mile Course, 3 mile, 7 fur., 24 yds. York Course is situated upon low ground, and, in consequence, becomes very heavy in wet weather.—*Turf Expositor.*

Racehorse, *s.* A horse bred to run for prizes.

There is much dispute with regard to the origin of the thorough-bred horse. By some he is traced to both sire and dam to Eastern parentage; others believe him to be the native horse, improved and perfected by judicious crossing with the Barb, the Turk, or the Arabian. "The Stud Book," which is an authority acknowledged by every English breeder, traces all the old racers to some Eastern origin; or it traces them until the pedigree is lost in the uncertainty of an early period of breeding. If a pedigree of a racer of the present day be required, it is traced back to a certain extent, and ends with a well-known racer;—or, if an earlier derivation be required, that ends either with an eastern horse, or in obscurity.

It must, on the whole, be allowed, that the present English thorough-bred horse is of foreign extraction, improved and perfected by the influence of the climate, and by diligent cultivation. There are some exceptions, as in the case of Sampson and Bay-Malton, in each of whom, although the best horses of their day, there was a cross of vulgar blood; but they are only exceptions to a general rule. In our best racing stables, and, particularly in the studs of the Earls of Grosvenor and Egremont, this is an acknowledged principle; and it is not, when properly considered, a principle at all derogatory to the credit of the country. The British climate, and British skill, made the thorough-bred horse what he is.

Whatever may be the truth as to the origin of the race-horse, the strictest attention has for the last fifty years been paid to pedigree. In the descent of almost every modern racer, not the slightest flaw can be discovered: or when, with the splendid exception of Sampson and Bay-Malton, one drop of common blood has mingled with the pure stream, it has been immediately detected in the inferiority of form, and deficiency of bottom, and it has required two or three generations to wipe away the stain, and get rid of its consequences.

The racer is generally distinguished by his beautiful Arabian head;—his fine and finely-set-on-neck;—his oblique, lengthened shoulders;—well-bent hinder legs;—his ample, muscular quarters—his flat legs, rather short from the knee downward, although not always so deep as they should be;—and his long and elastic pastern. These are separately considered where the structure of the horse is treated of.

The racer, however, with the most beautiful form, is occasionally a sorry animal. There is sometimes a want of energy in an apparently faultless shape, for which there is no accounting; but there are two points among those just enumerated which will rarely or never deceive, a well-placed shoulder, and a well-bent hinder leg.

It has been imagined that the breed of racing horses has lately very considerably degenerated. This is not the case. Thorough-bred horses were formerly fewer in number, and their performances created greater wonder. The breed has now increased twenty-fold, and superiority is not so easily obtained among so many competitors. If one circumstance could, more than any other, produce this degeneracy, it would be our absurd and cruel habit of bringing out horses too soon, and the frequent failure of their legs before they have come to their full power. Childers and Eclipse did not appear until they were five years old: but many of our best horses, and those perhaps, who would have shown equal excellence with the most celebrated racers, are foundered and destroyed before that period.

Whether the introduction of short races, and so young horses, be advantageous, and whether stoutness and usefulness may not thus be somewhat too much sacrificed to speed: whether there may be danger that an animal designed for service may, in process of time, be frittered away almost to a shadow of what he was, in order that at two years old, over the one-mile-course, he may astonish the crowd by his fleetness,—are questions that more concern the sporting man than the agriculturist; and yet they concern the agriculturist too, for racing is principally valuable as connected with breeding, and as the test of breeding. *Vide* Training.

Racer, *s.* A Runner, one that contends in speed.

Rack, *s.* An engine of torture; extreme pain; the clouds as they are driven by the wind; a wooden grate in which hay is placed for cattle; arrack, a spirituous liquor.

Racket, *s.* An irregular clattering noise; the instrument with which players strike the ball.

Rackets, *s.* A fine manly game, in which a small ball and cat-gut implement are used.

Raffle, *s.* A species of game or lottery, in which many stake a small part of the value of some single thing, in consideration of a chance to gain it.

ODDS ON A RAFFLE WITH NINE DICE, OR THE HIGHEST IN THREE THROWS WITH THREE DICE.

It is	10077695	to 1,	54	
	1007768	.. 1,	53	or more.
	183229	.. 1,	52	—
	45809	.. 1,	51	—
	14093	.. 1,	50	—
	5032	.. 1,	49	—
	2016	.. 1,	48	—
	886	.. 1,	47	—
	422	.. 1,	46	—
	215	.. 1,	45	—
	116	.. 1,	44	—
	66	.. 1,	43	—

that you do not throw

very near	39	to 1,	42	or more.
	$39\frac{1}{2}$	.. 1,	41	—
	$24\frac{1}{2}$	.. 1,	41	—
	$15\frac{3}{4}$	.. 1,	40	—
	$10\frac{1}{3}$	.. 1,	39	—
	$7\frac{1}{7}$	.. 1,	38	—
very near	5	.. 1,	37	—
	$3\frac{1}{2}$	.. 1,	36	—
	$2\frac{6}{11}$	.. 1,	35	—
or	28	.. 11,	35	—
	11	.. 6,	34	—
	9	.. 7,	35	—

that you do not throw

It is exactly equal that you throw 32 or more.—*Hoyle.*

Ragstone, *s.* A stone so named from its breaking in a rugged manner; the stone with which they smooth the edge of a tool new ground and left ragged.

Rake, *v.* To gather with a rake; to heap together and cover; to fire on a ship in the direction of head and stern; a veterinary operation.

Raking, *a.* An operation performed on a horse.

Raking.—This consists in introducing the hand into the horse's rectum, and drawing out any hardened dung that may be there. It may be necessary in costiveness or fever, if a clyster pipe cannot be obtained; but an injection will better effect the purpose, and with less inconvenience to the animal. The introduction of the hand into the rectum is, however, useful to ascertain the existence of stone in the bladder, or the degree of distension of the bladder in suppression of urine, for the bladder will be easily felt below the gut; and at the same time, by the heat of the intestine, the degree of inflammation in it or in the bladder may be detected.—*Blaine.*

Ram, *s.* A male sheep.

Rammer, *s.* An instrument with which anything is driven hard; the stick with which the charge is forced into the gun.

Rana, *s.* That class of animals in the Linnæan system to which the frog and the toad belong.

Random, *a.* Done by chance, roving without direction.

Range, *v.* To place in order; to pass over; to rove at large.

Range, *s.* Anything placed in a line; excursion; room for excursion; compass taken in by anything excursive; line of a shot.

RANGER, *s.* One that ranges; a rover; a dog that beats the ground; one whose business it is to rechase the wild beasts from the purlieus of the forest, and to present offences within the forest.

RAPACIOUS, *a.* Given to plunder, seizing by violence.

RAPE, *s.* Something snatched away; a plant, from the seed of which oil is expressed.

RASH, *a.* Hasty, precipitate. An efflorescence on the body, a breaking out.

RASP, *v.* To rub to powder with a very rough file.

RASP, *s.* A large rough file, commonly used to wear away wood.

RAT, *s.* An animal of the mouse kind that infests houses and ships.

RATAFIA, *s.* A fine liqueur, prepared from the kernels of apricots and spirits.

RATAN, *s.* An Indian cane.

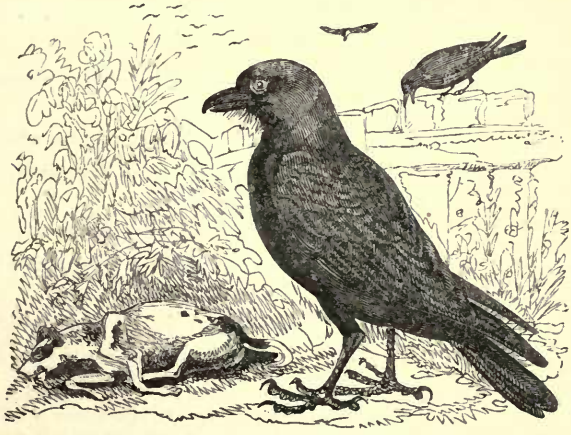
RATE, *s.* The pace of a setter, pointer, or horse.

RATE, *v.* To value at a certain price; to chide hastily and vehemently.

RATSBANE, *s.* Poison for rats; arsenic.

RAVEL, *v.* To entangle, to involve, to perplex.

RAVEN, *s.* A large black fowl; a bird of prey.



Raven or Great Corbie Crow. (*Corvus Corax*, LINN.; *Le Corbeau*, BUFF.)—This is the largest of this kind; its length is above two feet; breadth four. Its bill is strong and very thick at the base; it measures somewhat more than two inches and a half in length, and is covered with strong hairs or bristles, which extend above half its length, covering the nostrils: the general colour of the upper parts is a fine glossy black, reflecting a blue tint in particular lights; the under parts are duller, and of a dusky hue.

The raven is well known in all parts of the world, and in times of ignorance and superstition, was considered as ominous, foretelling future events by its horrid croakings, and announcing impending calamities: in those times the raven was considered as a bird of vast importance, and the various changes and modulations of its voice were studied with the most careful attention, and were made use of by artful and designing men to mislead the ignorant and credulous. It is a very long-lived bird, and is supposed sometimes to live a cen-

tury or more. It is fond of carrion, which it scents at a great distance; it is said that it will destroy rabbits, young ducks, and chickens: it has been known to seize on young lambs which have been dropped in a weak state, and pick out their eyes while yet alive: it will suck the eggs of other birds; it feeds also on earth-worms, reptiles, and even shell-fish when urged by hunger.

It may be rendered very tame and familiar, and has been frequently taught to pronounce a variety of words: it is a crafty bird, and will frequently pick up things of value, such as rings, money, &c. and carry them to its hiding place. It makes its nest early in the spring, and builds in trees and the holes of rocks, laying five or six eggs, of a pale bluish green colour, spotted with brown. The female sits about twenty days, and is constantly attended by the male, who not only provides her with abundance of food, but relieves her in turn, and takes her place in the nest.

The natives of Greenland eat the flesh, and make a covering for themselves with the skins of these birds, which they wear next their bodies.

* * *

In 1808, a raven was kept at the Red Lion, Hungerford: a gentleman's chaise, in turning into the yard, ran over the leg of his Newfoundland-dog, and while examining the injury done, Ralph was evidently a concerned spectator. When the dog was tied up, under the manger with the horses, Ralph attended upon him with particular kindness: this was so marked, that it was observed to the hostler, who said, that he had been bred from his pinfeather in intimacy with a dog, that the affection between them was mutual, and that all the neighbourhood had been witnesses of the acts of fondness they had conferred upon each other. This dog also had his leg broke, and during the long time he was confined Ralph waited upon him and carried him provisions daily; by accident the hostler shut the stable door, and Ralph was deprived of the company of his friend the whole night, but in the morning the bottom of the door was found so pecked, that Ralph would, in another hour, have made his own entrance port.—*Bewick.*

Ravenous, *a.* Furiously voracious, hungry to rage.

Raw, *a.* Not subdued by fire; not covered with the skin; sore; immature; unseasoned; bleak, chill.

Ray, *s.* A beam of light; a genus of the class amphibia, including the skate, sturgeon, thornback, and torpedo.

Rebound, *s.* The act of flying back in consequence of motion resisted.

Recharge, *s.* Among hunters, a lesson which the huntsman winds on the horn when the hounds have lost their game.

Recheat, *s.* A lesson which the huntsman winds on the horn when the dogs are at fault, to bring them back from pursuing a counterscent.

Recipe, *s.* A medical prescription.

Recoil, *v.* To rush back from resistance; the rebound of a gun.

Recoil.—Whatever retards the exit of the charge operates like an increase of lead, and, by confining the force of the explosion the more to the barrel, produces a greater recoil, hence partly it is, that in proportion as the barrel becomes foul within by repeated firing, the recoil increases. A piece will recoil if, from the breach plug being made too short, there remain some turns of the screw not filled up, these hollows, wherein a part of the powder is lodged, forming an obstacle that confines and retards the explosion. A barrel mounted on a stock that is very straight, will recoil more than when mounted on a stock that is considerably bent, as the curvature serves to break and deaden the force of the recoil; and, sometimes also, a fowling piece will recoil from the shooter applying it improperly to his shoulder, for if the butt is not applied closely to the shoulder, or is applied so as to be supported only at a single point, the recoil will be much more sensibly felt, than when the hollow of the butt embraces the shoulder, and is firmly supported by the weight of the body. Guns are observed to recoil more after being fired a number of times, than they did at the beginning. The matter which is left on the inside of the barrel after the explosion, and which increases on every discharge, attracts moisture very quickly, especially if the saltpetre employed in the powder was not well purified from the admixture of common salt which it contains in its rough state. This moisture becomes considerable after a few discharges, and, being formed into vapour by the heat during the explosion, adds its expansive effort to that of the inflamed pow-

der, and greatly increases the agitation and recoil. Owing to this cause, probably, rather than to that before mentioned, arises the recoil, from some turns of the breech screw not being filled up by the breech plug, and thereby affording a lodgment to moisture.—*Essay on Shooting.*

RECTIFIED SPIRIT, *s.* Alcohol, or spirit of wine.

This is obtained in a dilute state from fermented liquors by distillation, and is afterwards rectified or concentrated, by repeating the operation two or three times. Rectified spirit is the basis of many useful embrocations, for strains, bruises, &c. It dissolves camphor and all the resins very readily: hence we have camphorated spirit, opodeldoc, Friar's balsam, &c. Mixed with an equal quantity of water it forms what is termed proof spirit, which is the liquid generally employed for making tinctures. Rectified spirit is often used undiluted as an embrocation for strains; and, when the injury is deeply seated, may be serviceable. I think, however, it is rendered more efficacious by the addition of soap, ammonia and camphor, or oil of rosemary. Rectified spirit is never employed as an internal remedy in the horse; though fermented liquors, such as beer, porter, or wine, have been often given with advantage, in cases which required cordials. Horses, that have been so fatigued with a long chase or journey as to refuse their food and appear quite exhausted, are much refreshed by taking a cordial ball in half a pint of beer, and feed soon after with great alacrity. The advantage thus derived is merely temporary, as they are not by this treatment rendered adequate to another chase or journey quicker than they would otherwise be.

RED, *a.* Of the colour of blood, of one of the primitive colours.

REDBREAST, *s.* A small bird so named from the colour of its breast, called also a Robin.

This well-known species of warbler needs little description. The upper parts are of a yellowish brown, tinged with ash-colour; forehead and from chin to breast of a deep rufous orange; belly and vent whitish; the plumage of both sexes are alike; the nestling-feathers of young birds are spotted; and they do not possess the red on the breast for two or three months after they leave the nest.

It is said to be a migrative species, but from no other reason than their more frequent and numerous appearance about our habitations in the winter, when the woods and fields are destitute of insects; it is then they seek the protection of man, and are so tame as to enter doors and windows, and pick up the crumbs fallen from the table; here they too frequently fall a sacrifice to the watchful cat.

"The redbreast," says Fleming, in a letter to Colonel Montagu, "is only occasionally observed in Zetland after gales of wind." Whether in spring or autumn, or at what season, is not mentioned; but most probably in the latter, when those which breed in the more northern parts of the European continent may be shifting their quarters, and, by accident, are driven from Norway. It sings throughout the winter, except in severe weather. About the beginning of April it prepares a nest in some mossy bank or out-building, composed of dead leaves, green moss, and stalks of plants, lined with hair; and lays from five to seven whitish eggs spotted with rust-colour and cinereous; their weight about twenty-six grains.—*Montagu.*

RED DEER, *s.* The stag, the greater deer. *Vide* STAG.

REDLEAD, *s.* Minium.

REDPOLE, *s.* A bird of the finch tribe, so called from a red spot on the crown of the head.

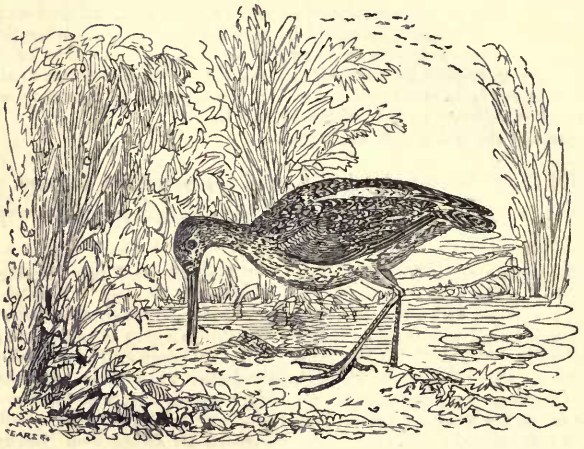
This bird is less than the common linnet and twite, and although like them, subject to a partial change of colour at a particular season, may be readily distinguished from them, as well by other peculiar characteristics as by its inferiority of size, weighing about two drachms and a half; length five inches; the bill is of a light colour, inclining to dull yellow; irides hazel; the forehead is of a purplish red; the feathers of all the other parts are dusky, margined with rufous-brown; chin black; throat and breast pink; sides streaked with dusky; belly white; quills and tail dusky, edged with pale brown; in some the rump is tinged with pink; legs dusky.

The female differs in being somewhat lighter above, and in the colour on the head, which is not so bright, sometimes yellowish. This

sex has the black spot on the chin, but none of the pink on the breast and throat. In confinement they lose the pink colour on the breast at the first moulting; at the second the colour on the head changes to a greenish yellow. Bechstein had a male, the head of which turned to a fine gold colour after the third moulting. The young birds are destitute of the pink feathers; and indeed the males are subject to as much variety as the linnet, and sometimes have no red at all on the breast.

This species is very generally diffused throughout Europe; but its native regions seem to be the northern parts. They reach Germany in great flocks towards the end of October, and again retire in the months of March and April.—*Montagu.*

Redshank, Red-legged Horseman, Pool Snipe, or Sand Cock, (*Scolopax calidris*, Linn.; *Le Chevalier aux Pieds rouges*, Buff.) *s.* A bird.



This bird weighs about five ounces and a half: its length is twelve inches, and breadth twenty-one. The bill, from the tip to the corners of the mouth, is more than an inch and three quarters long, black at the point, and red towards the base: the feathers on the crown of the head are dark-brown, edged with pale rufous; a light or whitish line passes over and encircles each eye, from the corners of which a dark-brown spot is extended to the beak: irides hazel; the hinder part of the neck is obscurely spotted with dark-brown, on a rusty ash-coloured ground; the throat and forepart are more distinctly marked or streaked with spots of the same colour: on the breast and belly, which are white, tinged with ash, the spots are thinly distributed, and are shaped something like the heads of arrows or darts. The general appearance of the upper parts of the plumage is glossy olive-brown; some of the feathers are quite plain, others spotted on the edges with dark-brown, and those on the shoulders, scapulars, and tertials are transversely marked with the same coloured waved bars, on a pale rusty ground: the bastard wing and primary quills are dark-brown; the inner webs of the latter are deeply edged with white, freckled with brown, and some of those quills next the secondaries are elegantly marked, near their tips, with narrow brown lines, pointed and shaped to the form of each feather; some of the secondaries are barred in nearly the same manner, others are white; back white; the tail-feathers and coverts are beautifully marked with alternate bars of dusky and white; the middle ones slightly tinged with rust colour; legs red, and measure from the end of the toes to the upper bare part of the thigh, four inches and a half.

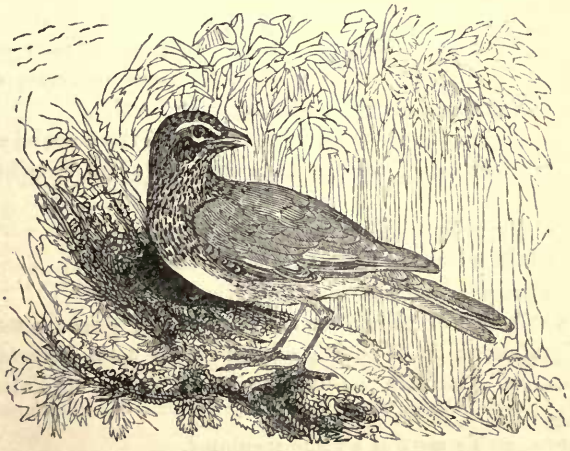
This species is of a solitary character, being mostly seen alone, or in pairs only. It resides the greater part of the year in the fen countries, in the wet and marshy grounds, where it breeds and rears its young. It lays four eggs, whitish, tinged with olive, and

marked with irregular spots of black, chiefly on the thicker end. Pennant and Latham say, it flies round its nest, when disturbed, making a noise like a lapwing. It is not so common on the sea-shores as several others of its kindred species.

Ornithologists differ much in their descriptions of the redshank, and probably have confounded it with others of the red-legged tribe, whose proper names are yet wanting, or involved in doubt and uncertainty. Latham, in his supplement, describes this bird as differing so much in its summer and winter dress, and its weight, as to appear to be of two distinct species. There is reason to believe that several species of the scolopax and tringa genera, which have not been taken into the list of British birds, appear occasionally in Great Britain, and that this circumstance, together with the difference of age and sex, has occasioned much confusion.

Red-legged Godwit, Spotted Snipe or Barker, Spotted Redshank. (*Scolopax Totanus*, LINN.; *Le Chevalier Rouge*, BUFF.) —The length of this bird, from the tip of the bill to the end of the tail is twelve inches, and to the end of the toes, fourteen inches and a half; its breadth, twenty-one inches and a quarter, and its weight about five ounces two drachms, avoirdupoise. The bill is slender, measures two inches and a half from the corners of the mouth to the tip, and is for half its length, nearest to the base, red, the other part black: irides hazel; the head, neck, breast, and belly are spotted in streaks, mottled and barred with dingy ash-brown and dull white, darker on the crown and hinder part of the neck: the throat is white, and lines of the same colour pass from the upper sides of the beak over each eye, from the corners of which two brown ones are extended to the nostrils: the ground colour of the shoulders, scapulars, lesser coverts, and tail, is a glossy olive-brown; the feathers on all these parts are indented on the edges, more or less, with triangular-shaped white spots. The back is white; the rump barred with waved lines of ash-coloured brown, and dingy white; the vent-feathers are marked nearly in the same manner, but with a great portion of white: the tail and coverts are also barred with narrow waved lines, of a dull ash-colour, and, in some specimens, are nearly black and white. Five of the primary quills are dark-brown, tinged with olive; the shaft of the first quill is white; the next six are, in the male, rather deeply tipped with white, and slightly spotted and barred with brown: the secondaries, as far as they are uncovered, when the wings are extended, are of the same snowy whiteness as the back. The feathers which cover the upper part of the thighs, and those near them, are blushed with a reddish or vinous colour: the legs are of a deep orange red, and measure, from the end of the middle toe-nail to the upper bare part of the thigh, five inches and a half.—*Bewick.*

REDWING, *s.* A bird.



Redwing, Swinepipe, or Wind Thrush. (*Turdus Iliacus*, LINN; *Le Mauvis*, BUFF.) —This bird is not more than eight inches in length. The bill is of a dark-brown colour;

eyes deep hazel; the plumage in general is similar to that of the thrush; but a white streak over the eye distinguishes it from that bird: the belly is not quite so much spotted, and the sides of the body, and the feathers under the wings, are tinged with red, which is its peculiar characteristic; whence also it derives its name.

These birds make their appearance a few days before the fieldfare, and are generally seen with them after their arrival; they frequent the same places, eat the same food, and are very similar to them in manner. Like the fieldfare, they leave us in the spring, for which reason their song is quite unknown to us; but it is said to be very pleasing. The female builds her nest in low bushes or hedges, and lays six eggs, of a greenish blue colour, spotted with black.

This and the former are delicate eating: the Romans held them in such estimation that they kept thousands of them together in aviaries, and fed them with a kind of paste, made of bruised figs and flour, and various other kinds of food, to improve the delicacy and flavour of their flesh; these aviaries were so contrived as to admit light barely sufficient to direct them to their food; every object which might tend to remind them of their former liberty was carefully kept out of sight, such as the fields, the woods, the birds, or whatever might disturb the repose necessary for their improvement. Under this management these birds fattened, to the great profit of their proprietors, who sold them to Roman epicures for three denarii, or about two shillings sterling, each.

* * *

A redwing was taken up, November 7th, 1785, at six o'clock in the morning, which, on its approach to land, had flown against the light-house at Tynemouth, and was so stunned that it fell to the ground and died soon after; the light most probably had attracted its attention.

* * *

When redwings appear on the eastern coast, they as commonly announce the approach of the woodcock, as does the arrival of the wryneck that of the cuckoo, in the south.—*Bewick—Daniel.*

Reed, *s.* A hollow knotted stalk, which grows in wet grounds; a small pipe; an arrow.

Reek, *s.* Smoke, steam, vapour; a pile of corn or hay.

Reel, *s.* A turning frame upon which yarn is wound into skeins from the spindle; an implement for winding up the angler's line.

Reeve, *s.* The female of the ruff.

Refuse, *s.* That which remains disregarded when the rest is taken.

Regarder, *s. obs.* The regarder is a ministerial officer of the forest, sworn to make regard there as usual, to view and enquire of all the officers within the forest of vert or venison, and of concealments or defaults of the forester, or other officers of the forest.

Rein, *s.* The part of the bridle which extends from the horse's head to the driver's or rider's hand; used as an instrument of government, or for government.

Rein, *v.* To govern by a bridle; to restrain, to control.

Reins, *s.* The kidneys, the lower part of the back.

Relay, *s.* Horses on the road to relieve others.

Remove, *s.* Change of place; the act of changing place; a step in the scale of gradation; act of putting a horse's shoes upon different feet.

Rendezvous, *s.* Assembly, meeting appointed; place appointed for an assembly.

Rendezvous, *v.* To meet at a place appointed.

Rennet, *s.* The ingredient with which milk is coagulated, in order to make cheese.

RENOUNCE, *v.* To disown, to abnegate; a term in card playing.

REPELLENT, *s.* An application that has a repelling power.

REPERCUSSION, *s.* The act of driving back, rebound.

REPTILE, *a.* Creeping upon many feet.

REPTILE, *s.* An animal that creeps upon many feet.

RESINOUS, *a.* Containing resin, consisting of resin.

RESPIRATION, *s.* The act of breathing; relief from toil.

REST, *s.* Sleep, repose; cessation from disturbance; cessation from bodily labour.

REST, *v.* To lay as on a support; to steady a gun when taking aim.

RESTHARROW, *s.* A plant.

RESTIFF, *a.* Unwilling to stir; resolute against going forward; stubborn.

RESTIVENESS, *s.* Obstinate reluctance; viciousness in a horse.

RESTORATIVE, *s.* A medicine that has the power of recruiting life.

RETICLE, *s. obs.* A small net.

RETICULATED, *a.* Made of net-work.

RETINA, *s.* The optic nerve which receives the image of the object in vision.

RHEUM, *s.* A thin watery matter oozing through the glands, chiefly about the mouth and eyes.

RHEUMATISM, *s.* A painful distemper supposed to proceed from acrid humours.

Acute general rheumatism, or rheumatic fever, is inflammation of the muscular system, and has been already noticed under the head founder, or chill. There is, however, a different kind of rheumatic affection I have sometimes met with, in which the joints are affected; generally, I believe, the hock joint; but probably the other joints are equally liable to this affection. It is sometimes accompanied with a morbidly irritable state of the stomach and bowels, and if a strong or even a common purgative is given in such a case, there will be danger of its producing inflammation of these parts. The same irritable state of the stomach and bowels is sometimes observable also in chills, as they are termed, and when the hind-leg is suddenly attacked with inflammation and swelling, after violent shivering and fever. In all such cases, though physic is often necessary, that is, when the bowels are in a costive state, yet it is likely to do great harm unless in a moderate dose, and guarded with cordials or opium. The following ball may be given on such occasions: it must be observed, however, that copious bleeding is the essential remedy, and must precede every other.

PURGATIVE WITH OPIUM, OR CORDIAL CATHARTIC.

Barbadoes aloes . . .	4 to 5 dr.
Ginger	1 dr.
Hard soap	3 dr.

Syrup enough to form the ball.

The affected parts may be fomented and rubbed with some stimulating liniment or embrocation.—*White.*

RHUBARB, *s.* A medical root, slightly purgative, referred by botanists to the dock.

RIB, *s.* A bone in the body, any piece of timber or other matter which strengthens the sides; a slip of iron attached to gun barrels for strength or ornament.

RIBBED, *a.* Furnished with ribs; enclosed as the body by ribs.

RICK, *s.* A pile of corn or hay regularly heaped up and sheltered from wet.

RICKETS, *s.* The rickets is a distemper in children, from an unequal distribution of nourishment, whereby the joints grow knotty, and the limbs uneven; a disease in horses.

Rickets is very like to tabies, in all its causes, and also in some of its appearances and effects; it is common to the same breeds, and is both occasional and hereditary. It is occasional when it meets with the circumstances of confinement, bad air, filth, and unwholesome food, or the milk of an unhealthy mother. Many whelps are born with the predisposition, among the fancy breeds in the confined parts of great cities and large towns, particularly pugs and the smaller sorts of bull dogs: there is also a breed of wry-legged terriers which without doubt originated in ricketty specimens, which were afterwards cultivated for particular purposes, principally rabbit-hunting. The affection often appears soon after birth; and shows itself by the slow development of the body, except in the head, belly, and joints, all of which enlarge at the expense of the rest of the parts: particularly it attacks all the joints of the extremities; these swell into protuberances, probably from a sympathy in the constitution to make up by bulk what the bones want in ponderosity, but which is not effected; for, deprived of their earthy solidifying principles, they yield to the superincumbent weight, and the cylindrical ones particularly become crooked. Cleanliness, good air, free exercise, and wholesome food, will commonly prevent it in the future breeds of such dogs as have shown a disposition to it. As a cure, an invigorating diet added to these, with the occasional use of tonic bitters if the appetite fails, or the digestion should appear defective, will answer the intention.—*Blaine.*

RIDE, *v.* To travel on horseback; to travel in a vehicle; to be borne, not to walk; to manage a horse; to be supported, as ships on the water.

RIDER, *s.* One who is carried on a horse or in a vehicle; one who manages or breaks horses.

In Riding.—Jockeys may be divided into several classes: namely, the southern jockeys, the northern jockeys, and the dirty jockeys. The first class are those which are seen at Newmarket, Ascot, Epsom, and indeed in most of the races in the southern counties, and also at Doncaster. The second class attend the Yorkshire meetings, and what, for the sake of distinction, I will call the northern circuit. The third or dirty class, are met with still farther to the north, in Westmoreland, Cumberland, &c. and are remarkable for their slovenly, dirty, and unworkmanlike appearance:—it is no uncommon occurrence to see these wretched apologies for jockeys (at Kendal for instance) ride in dirty jackets, dark greasy corduroys, and gaiters of a similar complexion. Mr. Thomas Simpson's jockey frequently appears thus, though Mr. Simpson is wealthy and highly respectable; but evidently not very scrupulous on the score of cleanliness. The southern jockeys, much to their credit, appear on horseback with a neatness and cleanliness bordering upon elegance; and their performance is, for the most part, of a superior order—superior, in fact, to their rivals of the north; they are illiterate ignorant men, with little exception: though, in private, they affect a mysterious, but plebeian importance, and would willingly be thought a sort of semi-gentlemen, which, however, their very attempt to assume such a character renders impossible. There is much less of this ridiculous and ignorant affectation in the northern jockeys, who yet seem, it must be confessed, not nearly so anxious about their appearance on horseback (as far as relates to the advantage of dress,) as their brethren of the south.

The question next arises as to which are the best workmen. The southerns, beyond a doubt; that is, speaking generally: but, it must be admitted, that there are some excellent northern jockeys, who would lose little by the comparison with either Chifney, Robinson, Dockeray, or any of the most favourite riders of the present day. Buckle is now grown old, and does not often appear; otherwise, I should place him at the head of the list. H. Edwards must be classed, I imagine, amongst the northern jockeys; he has a good seat, good hands, and a good head; and is altogether an excellent rider: I am doubtful if his superior is to be found. T. Shepherd, a northern jockey, has a good head, and I have always admired his riding; I think his abilities have generally been much underrated. Lear is a promising young northern jockey; but he must be careful not to let his self-opinion and overbearing temper supersede the plain uncultivated sense he possesses. Templeman is what may be called an improving jockey: he has a good seat, and I have frequently been much pleased with his performances. He rode Dr. Faustus (Sir T. Stanley's) remarkably well at the Liverpool summer meeting, and I thought won the cup—I was not singular in this opinion: the judge, how-

ever, decided in favour of Velocipede. I never recollect observing a horse better managed than Forth managed his own horse Frederick, when running this year (1829) at Epsom, for the Derby. He had betted to a considerable amount upon Exquisite (also his own horse, and came in second) particularly with Mr. Crockford; but shifted his money the evening before running on Frederick, and thus became a winner to a very considerable amount. There are many very awkward jockeys, possessing but very slender requisites for the profession which they have embraced; to point them out, however, by name, would appear ill-natured and invidious.

It is some dozen years or more since "old Billy Pierse" quitted the avocation of a jockey. This man I always considered as a very superior rider—as one of the best I ever saw. In stature he was one of the shortest of his fraternity: but he was a sort of dwarf Hercules: he was able to give his horse a pull without any perceptible movement of his body; and of all the jockeys I ever saw, not one sat so steadily upon his horse. He never acquired the fame of Chifney; though there are those who think his merits were equal, if not superior to that celebrated jockey:—such is the opinion of one gentleman, in particular, whose superior judgment I have frequently experienced and very much admired.

What I have denominated the "dirty jockeys," are little worthy of consideration. They are very indifferent riders, but made up of trick and cunning; and ready at any time to put in practice their sinister arts for the purposes of deception, swindling and fraud.

* * *

I have not the least doubt, were this description of jockeyship entirely superseded, it would give very general satisfaction to the true friends of the turf. In the first place, with the exception of Lord Wilton, Mr. White, and some others, there are few gentlemen but what make a poor, or perhaps ridiculous, figure in riding a race. When gentlemen are to ride, it seldom happens that the patience of the multitude is not put to the test: if the preparations for gentlemen riders are not more complex than those of the professed jockeys, they cannot be either so well defined, or so direct, since they occupy a period of time of at least six times the duration. But this is by no means the worst of the business:—the system is liable to very gross abuse; and a class of men contrive to insinuate themselves into it, who have very meagre pretensions indeed to the character of gentlemen, and whose operations are, for the most part, merely a cloak for the basest purposes. I have often been surprised, that those genuine or sterling gentlemen who choose to contend in the race, are not more scrupulous as to the persons in whose company they thus appear: accustomed as they are to the turf, they cannot be unconscious, surely, that men frequently are seen as gentlemen riders, who are not only destitute of every honourable feeling, but whose exertions are in furtherance of a system of swindling, base and degrading, and utterly incompatible with the best interests of the turf. Also, a number of these men cannot come fairly under the description of amateur riders, since they go from race to race throughout the season, and are in the constant habit of riding, which they understand as well as the regular jockeys. What chance has a mere amateur against such competitors?

* * *

As to jockeys riding to order, nothing can be more correct or judicious, when such orders are intended to bring out the horse, so as to make the most of his powers, and to win if possible; but many cases have no doubt occurred of an opposite description, where the horse possessing the qualities to win, has been ridden purposely to lose. Yet, I am inclined to think, that suspicion has not unfrequently been expressed without just grounds. It should be recollected that horses vary considerably in their running, unaccountably so at times, either from latent disease, or other inexplicable cause; and therefore before a jockey is accused of wilfully riding to lose, the matter should be very dispassionately considered. Generally speaking, a jockey is very anxious to win, and I should be more inclined to suspect him of foul riding in order to win, than premeditatedly riding to lose, unless he had betted largely against the horse, and this is much more likely to occur where the jockey happens to be the owner of the horse, than under ordinary circumstances.—*Turf Expositor.*

Ridge, *s.* The top of the back; the rough top of anything; a steep protuberance; the ground thrown up by the plough; the top of the roof rising to an acute angle; *ridges of a horse's mouth* are wrinkles or risings of the flesh in the roof of the mouth, running across from one side of the jaw to the other.

Ridgling, *s.* A ram half castrated.

Ridingcoat, *s.* A coat made to keep out the weather.

RIFLE, *s.* A gun whose barrel is only constructed to shoot bullets.

I have made many experiments, and thought a good deal, by way of ascertaining the best calibre for answering the particular or general purposes to which the rifle may be applied. We all know that the resistance of the air is the chief obstacle which projected bodies have to encounter. It is so very great, that the range of projected spheres is more regulated by the degree of this resistance than by the velocity they receive from the powder,—the increased velocity of the ball being met by a geometrically increased ratio of atmospheric resistance. The larger bullets, therefore, having less surface in proportion to their mass, are, proportionately, much less resisted; so that the flights of the larger exceed those of the lesser, in more than the proportion of their respective diameters. For instance, a thirty-two pound shot, whose diameter is about six inches, will, with even a less proportionate charge of powder, and at an equal elevation, range half as far again as a nine pound, whose diameter is four inches. The proportion which the surface of a sphere bears to its mass, increasing in a geometrical ratio to the decrease of its diameter—the smaller the sphere, the greater is the proportionate resistance it meets with in its flight. At length, we find that small particles of the heaviest metals, becoming, as it were, nearly all surface, will actually float in the atmosphere, or remain suspended for a considerable time in the lightest fluids. Hence it is, that from the same piece, and with a similar charge of powder, we shall find that the range of an ounce of bird shot will regularly extend with the increased size of the shot employed, until, in progression, we get to the ounce bullet itself, which fits the piece; and which, by the by, at an elevation, would not be impelled further if projected from a twenty-four pound cannon.

The theory of the air's regular resistance to the onward progress of the bullet, must also be applied to the irregular action of the wind across the line of its flight; which action also increases in the ratio of the decrease of the weight of the bullet. At the distance of 315 yards I have found a strong cross wind to cause a rifle bullet of nineteen to the pound to diverge from three to four feet. On the other hand, I have used a rifle carrying a bullet of ten to the pound, which, with the same wind, did not, at the same distance, diverge more than about one foot. In constructing a butt for rifle practice, regard should, therefore, be had to the more usual direction of the wind; and, as far as the locality will allow, the butt should be placed so as to have the wind more frequently in the line of the range, either way, than across it.

For general, and especially for military purposes, such large rifles as the last mentioned would, coupled with the ammunition, be found too heavy. The rifles commonly used in the United States carry, I am told, a bullet of thirty-two to the pound. The adoption of so small a calibre, I take to have been occasioned by the use of the rifle being, in that country, originally and generally confined to the interior of thick forests, wherein it seldom happens that an object is to be fired at beyond the distance of one hundred yards; and where, moreover, the wind is much less felt than in an open country.

Under the above circumstances, the half-ounce rifles are quite adequate to their purpose; but in a more open, and especially in a mountainous country, the calibre of rifles should be considerably larger. In a hilly country, you are often in the actual presence of the enemy, and capable of greatly annoying him, at distances at which, on a plain, the view is interrupted and confined by the least considerable of surrounding objects. In a hilly country, occasions are perpetually offering, wherein long rifle ranges would cause considerable mischief to your opponents. Such long ranges can never be obtained, nor depended on, with the half-ounce rifles of the Americans and Tyrolese.

If the foregoing observations are founded on fact, it is easy to decide what sort of rifle should be applied to a particular purpose. With respect to general purposes, I am inclined to fix on the calibre of one ounce, or sixteen bullets to the pound. The English government rifles are of nineteen or twenty to the pound; to which calibre there is little objection, especially as it is the same as that of the cavalry carbines and pistols. However, I could advance several reasons,—I do not call them very important ones,—for preferring the French regulation; according to which all the fire-arms of all the different corps, both of cavalry and infantry, are of one and the same calibre, of sixteen bullets to the pound.

With respect to the rifle, at least, I would most strenuously recommend the substitution of percussion for flint locks; over which the advantages of the former are as great as the latter are superior to the huge wheel and pyrites locks of two centuries ago. In comparison to the percussion gun, the very best flint one absolutely hangs fire, and one out of twenty is usually a miss-fire. A cap is put on much quicker than a flint lock is primed; there is no time lost in changing flints; and if Mr. Joyce's percussion powder be used, there is no foulness or corrosion whatever; lastly, the rifles at present in use might be converted into copper caps at a trifling expense,

and new copper cap locks will cost less than flint ones. The only objection to the change (and I own it is a very great one indeed), is the blind prejudice of custom.

To render the use of the copper cap piece still more eligible, especially for military purposes, there should be no lateral vent-hole in the breech, but in lieu of it, a broad convex-headed screw; which, upon being withdrawn, opens a passage into the chamber under the nipple, of an eighth of an inch in diameter.

By this simple contrivance,—which I have applied to all my own guns, rifles, and pistols,—should any obstruction occur, either from wet or dirt, which cannot be removed by merely probing the nipple, it will infallibly be cleared out by removing the screw, scooping out the passage into the chamber, putting a little powder therein, and firing it off, after having probed the nipple and replaced the screw. The aperture formed by the removal of the screw, greatly adds to the facility of washing the barrel.

Instead of the brush and brass wire pricker, required for the present flint-lock service, the use of percussion pieces would make it necessary to substitute a little instrument of steel, resembling the letter T; one half of the horizontal part being a four, or, what is perhaps better, a three-sided pricker, or probe, of about one-twentieth of an inch diameter. The other half of the horizontal piece forms a kind of little scoop, corresponding to the diameter of the lateral screw above mentioned; upon the removal of which it is to be employed. The centre piece, or foot of the T, is a turnscrew, surmounted by a little ring to attach it to the jacket. As, however, the instrument will not be often wanted, perhaps it had better be kept in the trap of the rifle stock, in the inside of which I attach it, by a thong, to a little screw staple.

Some persons recommend that, instead of the lateral screw above described, the nipple itself should be taken out, in case of obstruction, or for the purpose of washing the barrel. This is not only ineffective, but highly improper, as it requires the use of a particular shaped key or pincer to screw the nipple; whereas, such things as will turn a screw, or serve the purpose of a pricker, are to be found everywhere.

The percussion powder for the caps, should by all means be composed of the nitrate of mercury, first brought into use by Mr. F. Joyce, of Old Compton Street. This, instead of having the slightest tendency to corrode the piece, would rather appear to possess an anti-oxidating property; for I have repeatedly found that, having fired upwards of twenty rounds with this percussion powder, and laid the piece by for a month without the least cleansing, it has been, at the expiration of that time, as perfectly free from the least speck of rust as the day it came new from the maker's shop. This would certainly not be the case even with a common flint lock; but as for the common percussion powder, composed of superoxygenated muriate of potash, it actually corrodes the parts of a gun as much as a drop of nitric acid itself; in fact, upon combustion it evolves, and leaves a residuum of that active fluid upon the iron. The consequent rapid destruction of the parts is such as would, especially in military service, occasion great inconvenience.

I have often compared notes, and reflected upon the respective advantages belonging to the magazine and copper cap locks, either for military or sporting purposes. Of magazine locks hitherto invented, the best and simplest is that by Forsyth, with the magazine sliding upon a plane, in which is the touch-hole, being connected with the cock by a bridle, which causes it to follow or precede its motions. For military use, this lock has the advantage over the copper cap, inasmuch as it saves the time and attention required for priming; nothing else being required than to cock and pull the trigger. In rifle practice, the use of this lock will more than retrieve the small additional portion of time which it requires to push down even my rifle cartridge, above what it takes to drop a cartridge into a common musket, with all its windage. On horseback, the advantages of such magazine locks are still more evident and important; as every one knows what an awkward loss of time and powder the operation of priming a flint lock occasions to a horseman in motion; whereas, with the magazine, containing thirty or forty primings, and a swivel ramrod, a carbine or pistol may be loaded with the same speed and precision on horseback, at a trot or a gallop, as when sitting in a chair. It is certainly easier to put on a copper cap than to prime a flint lock; but, with the magazine, there is no priming operation at all. With the common corrosive percussion powder above spoken of, the magazine lock certainly becomes very unfit for military purposes; for after having fired a shot or two, without subsequent cleaning, the lock will be nearly immovable the day after. However, in the late Spanish campaign of 1823, I had several magazine rifles and pistols, and no other than the corrosive percussion powder; but the officers and men to whom I entrusted them were so proud and so careful of them, as to keep them always in the most perfect order. Anyhow, it is evident that, for cavalry officers at least, the percussion magazine locks are undoubtedly, to be preferred; and, for both officers and men, I will observe, *en passant*, that it is far better to have one double pistol, than two, or half a dozen, single ones; and that whether

ther one or two pistols be used, they should, upon going into action, be secured by a thong to the sword-belt; so as, in case of need, to be instantly disposed of by being dropped over the left shoulder. By having only one pistol, one holster may be converted into a convenient pouch. It is essential that, in double pistols, carbines, or rifles, the axis of the barrels should be perfectly parallel from breech to muzzle. If this be strictly attended to, it is not of much consequence whether they be disposed as in a fowling-piece, or, as it is called, "under and over." One "under and over" pistol, eight inch barrels (the upper one rifled), nineteen bore, swivel ramrod, with a movable spring butt, to be kept in the other holster when not in use, is an excellent weapon for an officer. The movable butt must also serve the purpose of a mallet in loading the rifled barrel. Three or four slight taps will send the ball home: for, particularly on horseback, a rifle-barrelled pistol cannot well be loaded by pushing with so small a ramrod. With the smooth barrel, the party may fire away, either with ball or buck-shot cartridges, as fast as he pleases.

The copper cap offers the advantage of somewhat greater simplicity, and consequently less liability to derangement; and above all, it is, with the application of wax as hereafter described, perfectly water-proof. For the rifle service, therefore, it might perhaps, in one point of view, be preferable to the magazine; and certainly it is so in every respect for fowling pieces; in the use of which protection from the rain is of much more importance than the gain of a few seconds in loading, and where none of the inconveniences of priming on horseback are experienced. Duelling pistols should decidedly be copper caps. With such pistols there is no occasion whatever for a magazine; and I have found that a delicate trigger cannot be subjected to the slightest casual pull or strain of the magazine stirrup, without great liability to accident.

A remarkable defect in all the rifle-shooting that I have ever seen, is the improper construction of the ramrod, which is much too light. From this it results, that either the bullet is inserted with too little constriction to ensure its revolving on its axis to the end of an extensive flight; or, upon a tighter fit being attempted, much time and awkward exertion are expended in driving it properly "home."

The friction to be overcome in forcing a bullet into a rifle is, in some respects, analogous to that of a wedge or a nail in entering a piece of wood. Nobody would think of driving a nail or a wedge by mere pressure or pushing, which would not effect the object with a thousand times the force that would suffice in the shape of percussion or impingement. To load a rifle with a mallet is out of the question, especially for military purposes; but I find that the very best effect is produced by having the ramrod of solid brass, considerably heavier than the iron ones of the government rifles. I have also a bit of hard wood, turned into the shape of a pestle, acutely convex at the thick end; and to qualify it for hasty use, I fasten it by a string to the button of my jacket. With this I give the ball a smart tap, which drives it below the centre of its circumference into the grooves of the barrel. If the latter be perfectly clean, the bullet will go down all the way by mere pushing; but this will not be the case after a few shots have been fired, unless the bullet be smaller than it should be. Any how, the ramrod ought always to be flung down once or twice, in conclusion—as the particular ring or jar, so produced, furnishes the only true criterion of the bullet being really "home."

The ramrod being of the proper weight, and the end applied to the bullet being nearly equal to its calibre and well countersunk, the bullet will be moved by it with a few easy percussions; and should the barrel be ever so foul towards the breech, one or two flings with such a ramrod will send the bullet "home" with the assured ring. Neither a wooden nor a light metal ramrod will produce this effect after a few shots.

The ramrods I have had constructed for my own use are of solid brass, of about half an inch diameter except the end applied to the bullet, which, for a couple of inches, is so large as just to fit easily into the barrel. This large end is bored conically out, so as to contain between two and three drachms of powder, which, in leisure shooting, serves to introduce the charge with the rifle reversed. The ball-drawer, when required, screws into the other end of the rod.

The government rifle ramrods, might, for economy's sake, be made of iron; but they should be much heavier than they are. It is absolutely necessary to good and quick rifle shooting, that the bullet should be driven into the mouth of the piece by a stroke of some sort or other, previously to the use of the ramrod. Should the little wooden pestle mentioned above be deemed inconvenient in military practice,—which I opine it is not,—a similar effect might be produced by a tap with the round button-like end of the present rifle ramrods; though, for the sake of the barrel, I would recommend that this button should be of soft copper. Were it made more convex, it would drive the bullet further in.

It is evident, that for actual service, the practice cannot be rendered too simple. So I only just mention, *en passant*, that in my own cartridge pouch, twelve cartridges, to be used first, are made with thicker cotton, which,

for distinction's sake, is red or blue. So, as the barrel becomes foul, I get to the other cartridges, of somewhat easier introduction. I have found it very pleasant even to divide my cartridges into three different fits—red, blue, and white. A rifle, however, deteriorates in accuracy of shooting, in proportion to the number of shots fired without cleaning the barrel. For the foulness accumulating mostly towards the breech, forms there a certain degree of constriction and obliteration of the grooves, into which part the bullet being forced, no longer fits the other and greater portion of the barrel, so to ensure its spinning upon its axis to the end of a long range. After twenty-five shots, without cleaning, at 315 yards, in very dry weather, I have found the bullets begin to deviate a little; as they no longer struck the target on the side which had come foremost from the barrel.

With respect to the rifleman's cartridge-pouch, it should certainly be placed in front, buckling round the waist with a broad strap. The great thickness or projection which is given to the English rifle-pouches has many inconveniences; one of which is, that the weight, being concentrated into one almost cubic mass, causes great fatigue and annoyance, and perhaps injury, to the bearer. So far from having any such shape, I have found that the pouch ought to be so flat, as only to contain one row of tin tubes for cartridges, twenty-four of which occupy a space of about fourteen inches from hip to hip. The tubes being about five inches long, open at each end, but divided in the middle by a diaphragm, contain two cartridges each. When the uppermost row is consumed, to get at the others, it is only required to draw out the tubes, and reverse them in the pouch. If the cartridges are closed up, according to the method recommended in another part of this Treatise, they may, from the increased diameter of the folded end, be made to stick more or less firmly in the reversed half of the tubes, when these are drawn out to be turned. The pouch covers up with a flap of flexible leather, saturated with linseed oil, and secured at pleasure with a round button and loop. At one or both ends of the pouch is a little leathern bag, which may contain one or more packets of spare cartridges. I prefer, however, the method I have observed amongst the Calabrians and Corsicans, who, had they rifles, would be the most formidable skirmishers in the world. Their pouches go all round the body; though sometimes it is, as it were, a double pouch, with only small intervals at each hip, occupied by a bayonet on one side, and a middling-sized pistol on the other. From having only one row of tubes, these pouches are so little protuberant, as to be scarcely more perceptible, under or over the jacket, than a simple belt would be. When the cartridges are exhausted in front, the pouch is easily slipped round as much as required. Moreover, the weight being so distributed all round the body, gives scarcely any incumbrance; and I have found it a further improvement to partially support it by braces, worn under the jacket or waistcoat. Slips from the usual trouser suspenders will answer the purpose.

I must yet add a few words, by way of recommending some essential alterations in the method of exercising the troops to the use of that weapon, which will in most respects apply to the musket, carbine, and pistol.

In all the rifle or musket practice that I have ever seen or heard of, the men are made to fire at a target of about three feet diameter, placed before a bank or mound of earth, which receives all the missing bullets. Nothing can be more ineffectual in the way of instruction than this method! Every shot which misses the target, might as well have been fired vertically in the air, for any instruction it can have afforded to the firer! Even those bullets which do strike the target, will furnish no precise criteria of experience, unless the actual mark of each be immediately pointed out to the man who fired it.

The butt, or rather wall, for teaching rifle or musket shooting, should be at least twelve feet square, or rather twelve feet broad and twenty high. It should be covered entirely with cast-iron plates, of about three quarters of an inch thick. A convenient movable butt may be composed of a rectangular frame of wood, traversed like a window-frame, by pieces of wood at right angles or diagonally, having holes at the intersections for the admission of flat-headed bolts, by which the four corners of the cast-iron plates, corresponding to the size of the square divisions, will be secured to the frame, in close connexion with each other. Such a butt being set up endways, need only be connected, by a pulley at the top, to a couple of poles fixed in the earth, or to the top of a movable triangle. Any inclination, either forwards or backwards, may be given to it by means of the pulley. If it be inclined backwards at an angle of eighty to eighty-five degrees, the bullets, at medium and short ranges, will be reflected upwards nearly perpendicularly in the air.

The ground in front of the butt should be well levelled to the distance of about thirty yards, and covered with sifted road-scrapings, in preference to turf, gravel, or sand.

As unnecessary waste should in all cases be avoided, there is no reason why the recovery of the bullets should not be attended to. The best way to insure this, is to give the surface of the butt an inclination forward, of about ten degrees upon the horizontal line,

which will cause the bullets to be reflected downwards upon the smooth ground in front. The recovered lead might be given as the perquisite of the marker, or to the best shot at the drill.

A little on one side, and about five yards in advance of the butt, there should be a little screen, or epaulement, behind which a man might safely stand to perform the office of marker. This marker must be provided with a pot of lamp-black and water, with a brush affixed to a long stick, and a pot of whitewash. He must also have a bit of chalk, or a box of various coloured wafers, to mark the shots. To prepare the butt for shooting, it must be blackened all over. An object is then to be designated in the middle, either with whitewash, or with one or more sheets of white paper, according to the distance, and to the proficiency of the men who are to practise.

Instead of a circular object or target, I recommend, for military practice, a perpendicular parallelogram of two, four, six, twelve, or more inches broad, and one, two, three, or five feet high. If such a figure be made with whiting on the black butt, the bullets will make very distinct marks upon it, while those which miss it will leave white ones on the butt. If paper be used, care must be taken that it be not moved about by the wind. Pieces of thick wrought iron, of the shape and dimensions last described, to suit the different distances, &c., whitened and hung up against the butt, form excellent targets, especially for distant shooting. A loud gong-like clang announces the stroke of a bullet, while the marker may pretty well indicate, with a stick blackened at the end, its precise situation. He will also point out the site of those unresponsive shots which do not hit the mark. The presiding officer should use a telescope. This method will obviate the necessity of perpetually walking up to the target, which occasions much loss of time, confusion, and danger.

As I have always observed that it gives most satisfaction to the firer, when he sees the object fired at actually knocked down from its situation, this result might easily be obtained either with plates of plaster of Paris, or with metal ones. It may be also well to observe, that a bright red is undoubtedly the colour which can be seen at the greatest distance, and consequently the properest for a *bull's-eye*.

Every shot being marked, and pointed out to the man who fired it, he will always be able to form a criterion by which to regulate his next attempt. Men might as well be made to shoot at a bottle in the dark, as to practise without knowing where the bullet strikes—except when they may chance to hit the bull's-eye! I will venture to assert, that five shots fired with care, comparison, and reflection, will produce more improvement than fifty expended in the usual irrational manner.

It is particularly requisite to attend to the *perpendicular* line; and that no shot be allowed to count, which strikes the butt at more than five feet from the ground. In service, it is far better that the bullet should fall rather short, than that it should go over the adversary's head; as, in the former case, if it be on tolerably level ground, and in the right perpendicular direction, there is a great probability of its hitting him by the ricochet.

Both in rifle and pistol-shooting, an absurd custom prevails, of pointing the piece upwards, and bringing it down to a level with the object to be fired at. Instead of this practice, to which there are many objections, the piece should, previously to being cocked, be pointed downwards, at less than a yard from the foot of the firer. It is then to be steadily raised up in the line of the object, and when within a certain distance from the proposed level, the trigger (if not a detent) should be gradually pressed, according to the knowledge which the firer has of it, so that it may just go off without any pull at the desired moment. While the piece is in motion upwards, the perpendicular line described will be true and steady; and the quicker the motion the truer the line. When the perpendicular motion ceases, the horizontal vacillation begins. The aim, therefore, should not be prolonged beyond the arrival of the sight at the intended level; but whenever it is so, the piece must be lowered below it, and brought up again.

* * *

I have invented, says the Colonel, a simple method of rendering copper caps perfectly water proof. It consists in dipping the open rim, or base of the cap, into green taper wax, melted in a plate over a lamp. The melted wax must not be so deep as to spread into the cap up to the percussion powder at its extremity, but only so high as to form a slight lining of the wax around its inner base. This will suffice to cause the cap to close hermetically over the nipple; so that, provided it be not cracked, and the gun have no lateral vent-hole (which it ought not to have), the loaded piece may be put, over the lock, into a pail of water, without affecting either the cap or the charge. For sporting purposes, it is sufficient to have a few such caps in store, for wet weather. For military use, the whole of the caps might be so prepared at the laboratories.

* * *

Two rifle guns of the manufactory, the one valued at a hundred, the other at twenty-five guineas, were next loaded, and fired by General Beaumont and another person against my rifle, called Caroline, the distance agreed on being one hundred yards. General Beaumont's first shot hit the bull's eye, upon which he

was highly complimented; mine in return was an inch from it, and high odds were consequently in favour of the General. The succeeding shots were as follow:—

General Beaumont's second shot missed, and went over the iron plate three feet square.

Colonel Thornton's ditto near the bull's eye.

General B's third shot below the iron, and struck the ground.

Colonel T's ditto hit the bull's eye.

General B's fourth shot struck to the left of the plate thirteen inches from the mark.

Colonel T's ditto near the mark.

General B's fifth shot went over the mark.

Colonel T's ditto within one inch of the bull's eye.

The other rifle, shot by a person belonging to the manufactury, did not succeed better than General Beaumont, and the decision was consequently given in my favour. The rifle I shot with on this occasion, was the workmanship of Mr. Sluden, of Cockspur Street.

* * *

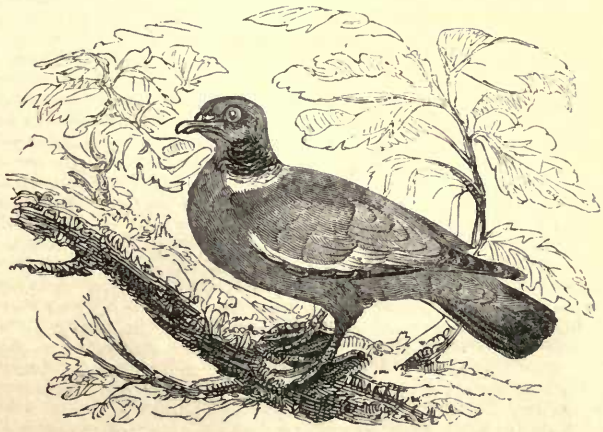
During the late war in 1775, a company of riflemen, formed from the backwoodsmen of Virginia, was quartered here (Lancaster in New England), for some time. Two of them alternately held a board, only nine inches square, between his knees, while his comrade fired a ball through it from a distance of one hundred paces. The board is still preserved, and I am assured, by several who were present, that it was performed without any manner of deception.—*Maccerone—Thornton, &c.*

Rigid, *a.* Stiff, not to be bent, unpliant, inflexible.

Ring, *s.* A circle; a circle of gold or some other matter worn as an ornament; a circular course; a circle made by persons standing round; a number of bells harmonically tuned; the sound of bells or any other sonorous body; a sound of any kind; a hunting term.

Ringbone, *s.* A hard callous substance growing in the hollow circle of the little pastern of a horse; it sometimes grows quite round like a ring.

Ringdove, Cushat, or Quest, (*Columba palumbus*, Linn.; *Le Pigeon ramier*, Buff.) *s.* A kind of pigeon.



This is the largest of all the pigeon tribe, and measures above seventeen inches in length. The bill is of a pale red colour; the nostrils are covered with a mealy red fleshy membrane; the eyes are pale yellow; the upper parts of the body are of a bluish ash-colour, deepest on the upper part of the back, the lower part of which, the rump, and forepart of the neck

and the head, are of a pale ash-colour; the lower part of the neck and are of a vinous ash-colour; the belly, thighs, and vent are of a dull white; on the hinder part of the neck there is a semicircular line of white (whence its name) above and beneath which the feathers are glossy, and of a changeable hue in different lights; the greater quills are dusky, and all of them, excepting the outermost, edged with white; from the point of the wing a white line extends downwards, passing above the bastard wing; the tail is ash-colour, tipped with black; the legs are red, and partly covered with feathers; the claws black.

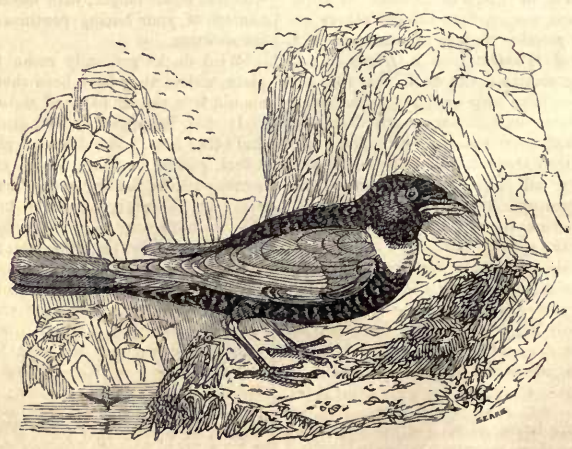
The ring dove is very generally diffused throughout Europe; it is said to be migratory; but that it does not leave us entirely we are well convinced, as we have frequently seen them during the winter on the banks of the Tyne, where they constantly breed in the spring. The nest is composed of small twigs, so loosely put together, that the eggs may be seen through it from below.

The female lays two white eggs, and is generally supposed to have two broods in the year. They feed on wild fruits, herbs, and grain of all kinds; they likewise are very fond of the roots of the pernicious weeds so well known to farmers under the name of *whickens;* the *Triticum repens*, or couch-grass, is the principal one; their flesh is very delicious when they have fed upon these, but it soon acquires an unpleasant flavour when they have lived upon turnips, which, from necessity, they are driven to eat in severe winters. The ring dove has a louder and more plaintive sort of cooing than the common pigeon, but is not heard except in pairing time, or during fine weather.

The ring dove or wood pigeon is the largest species in England, weighing about twenty ounces, and is too well known to need particular description as to its plumage.

The major part of them, in respect to this kingdom, are emigrants, departing elsewhere at the latter end of the year, and returning early in the spring. In the beginning of winter they assemble in large flocks, and leave off their plaintive cooing, which they commence in March, when they pair; they chiefly inhabit the woods, and build in the tops of trees, making a large, loose, and flat nest, with dry sticks and bents; they breed twice in the year, first in April; the second brood appears most numerously in August; they seldom lay more than two eggs, larger but alike in colour to other pigeons, and sit fourteen days before the young are hatched. Wood pigeons are excellent eating, except when they feed on turnips and rape. They are useful in coverts that are made preserves for pheasants, by immediately taking alarm if any person enters them after they have roosted, and quitting the trees upon which they had settled for the night, they fly about in great commotion. The gamekeepers know how to profit by this sort of intelligence in their search after intruders. —*Daniel.*

Ring Ousel, (*Turdus Torquatus*, Linn.; *Le Merle à Plastron Blanc*, Buff.) *s.*



This bird very much resembles the blackbird; its general colour is of a dull black or dusky hue; each feather is margined with a greyish ash colour; the bill is dusky; cor-

ners of the mouth and inside yellow; eyes hazel; its breast is distinguished by a crescent of pure white, which almost surrounds the neck, and from which it derives its name; its legs are of a dusky brown. The female differs in having the crescent on the breast much less conspicuous, and in some birds wholly wanting, which has occasioned some authors to consider it as a different species under the name of the rock ouzel.

Ring ousels are found in various parts of this kingdom, chiefly in the wilder and more mountainous districts of the country. Their habits are similar to those of the blackbird; the female builds her nest in the same manner, and in similar situations, and lays four or five eggs of the same colour; they feed on insects and berries of various kinds, are fond of grapes, and Buffon observes during the season of vintage are generally fat, and at that time are esteemed delicious eating. The same author says that in France they are migratory. In some parts of this kingdom they have been observed to change places, particularly in Hampshire, where they are known generally to stay not more than a fortnight at one time.

* * *

On the 13th of April, I went to the sheep-down, where the ring-ousels have been observed to make their appearance at spring and fall, in their way perhaps to the north or south; and was much pleased to see three birds about the usual spot. We shot a cock and a hen; they were plump and in high condition. The hen had but very small rudiments of eggs within her, which proves they are late breeders; whereas those species of the thrush kind that remain with us the whole year, have fledged young before that time. In their crops was nothing very distinguishable, but somewhat that seemed like blades of vegetables nearly digested. In autumn they feed on haws and yew-berries, and in the spring on ivy-berries. I dressed one of these birds, and found it juicy and well-flavoured. It is remarkable that they make but a few days' stay in their spring visit, but rest near a fortnight at Michaelmas. These birds, from the observations of three springs and two autumns, are most punctual in their return; and exhibit a new migration unnoticed by the writers, who supposed they never were to be seen in any of the southern counties.—*Bewick.*—*White's Selborne.*

RINGSTREAKED, *a.* Circularly streaked.

RINGTAIL, *s.* A kind of kite.

RINSE, *v.* To wash, to cleanse by washing. In case of canine bite, to instantly wash the wound in water, is the very simplest and most effective preventative.

RIPPLING, *s.* A moving roughness on the surface of a running water.

RIVER, *s.* A land-current of water larger than a brook.

The rivers in England amount to three hundred and twenty-five, though others enlarge their number to four hundred and fifty.

Shooting Wildfowl on a River, &c.—For killing common wild ducks that frequent a river, you have only to go a little before sunset; place yourself against any dark bush or bank, and there wait patiently, and out of sight, till they come down and fly round you, which they will generally do several times before they drop into the stream or marshes.

As wild ducks most frequently betake themselves to the springs and rivers about dusk, you have no occasion to wait for them longer than just the last hour, or half, before dark; but if they have been much disturbed or shot at, they will not always fly sufficiently early to be seen, though you may plainly hear the shrill and somewhat melancholy sound of their wings. If, however, the twilight is followed by a full moon, these birds will often withhold coming to the river till the moon has completely risen, in which case you might have to wait till an hour or two after dusk; but then the sport is considerably better, and will last much longer, with the additional advantage of your having continued good light for shooting.

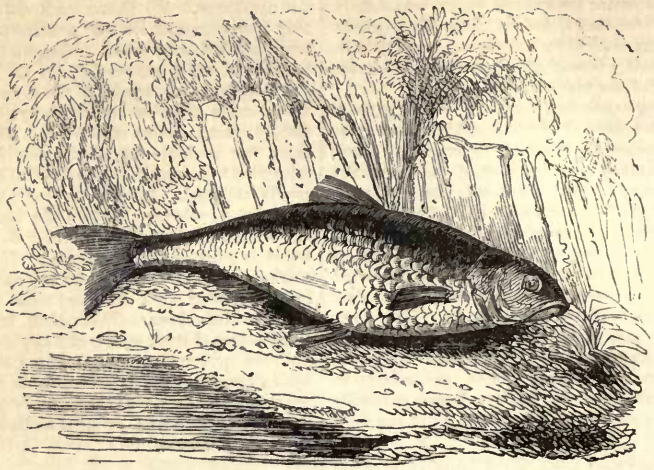
Wild ducks generally come to the same place, unless they have been shot at, or there should be a change of wind and weather.

It often happens that wild ducks, dunbirds, and other fowl, come down at night to large rivers, ponds, or lakes, which are so deeply surrounded by floating reeds, that no one can approach the water; and the birds, aware of this, do not lower their flight till they come near them. So far from this defying the shooter, it is one of the finest opportunities that can be afforded for death and destruction. Let him sit in a small punt or canoe, fore and aft among the rushes, where towards dusk he will be so completely hid, that he may either shoot at birds flying within pistol shot, or wait for a good chance on the water; from whence (his boat being hid on each side, and foreshortened to the only point of view) he will be pretty sure to escape the observation of the birds.—*Hawker.*

Rivet, *s.* A fastening pin clinched at both ends.

Rivulet, *s.* A small river, a brook, a streamlet.

Roach, *s.* A fish peculiar to fresh water.



Roach is a handsome fish either in, or fresh out of the water; it inhabits many of our deep, still rivers; affecting, like the others of this genus, quiet waters; it is gregarious, keeping in large shoals; it has a small head, a leather mouth, which is round, and also small, with the teeth in the throat; large eyes, the circle of which resembles gold colour, and the iris red; the roach is deep, but thin, and the back elevated; the scales are large, and easily fall off; the fins are in general red, particularly whilst in perfection; as they may also be known to be by the smoothness of the scales, which, when out of season, feel like the rough side of an oyster-shell: the side-line bends much on the middle, towards the belly, and the tail is a little forked. It is so silly a fish, that it has acquired the name of the water sheep.

Many ways are recommended to catch this fish by angling, when in deep waters, near piles of bridges, flood-gates, &c.: in hot weather, a May or ant-fly is to to be sunk by a little lead, within a few inches of the hook, near the sides of these posts or piles; this is to be pulled up very leisurely; a roach will generally attend the fly to the surface, there gaze on it for a moment, and then take it.

Stern fishing, is by fixing a boat (for without, roach of any size are hardly to be caught,) to the stern of a vessel returned from a voyage, whose bottom is foul, and furnished with insects, which the fish greedily devour. The line should not exeeed four feet, the float be within a foot of its top, and the rod very short; the bait to be three or four gentles, and dropt close to the ship's sides, not allowing the bait to swim more than eight or nine feet; begin at the first of the ebb-tide, and for two hours the roach will bite freely.—*Daniel.*

Road, *s.* Large way, public path; ground where ships may anchor.

Roadster, *s.* A hackney, a horse kept for the road.

The hackney, more than any other variety of horse, adds to our health and comfort; we ride him for amusement, and he transports us long distances on our personal avocations. On some only of these occasions speed is desirable; but on all safety is indispensable; and next to that, is the ease with which his motions are performed. These requisites remove the hackney still further than the hunter from that form which best suits the purposes of the racer. In the hackney, therefore, we scrutinise his fore quarters with the same attention that we pay to the hinder parts of the racer; for, as to the purposes of the latter, the fore parts are subordinate to the hinder, so in the hackney, speed being infinitely less important

than either ease or safety, and particularly the latter, it is essential that his fore parts be so formed as to ensure these properties. And here it may not be irrelevant to inquire, on what does the safety of action mainly depend? Is it on any particular care of the animal himself in his progression? or does it necessarily arise out of certain peculiarities in his formation, dependent on such an elevation of his feet as will ensure his not stumbling by any erroneous placing of them? The close observer, I think, will answer, that both are concerned: many horses go safely, and yet by no means elevate their legs high; but such are attentive to their steps; and when they see stones or other risings in their path, carefully avoid them. In my early practice I was called on to examine a horse intended for the French court, at the stables of that veteran dealer Choppin. I objected to the horse that he went close to the ground, which even his owner could not deny: but he still argued, that, although he appeared to go near the ground, yet that he was particularly safe in all his paces; and, as a lure to the purchase, would have offered a bet, that on the roughest ground he would not make one trip. As the animal in all other respects was desirable, ground purposely stony in the extreme was chosen, over which he was tried; and it was singular to remark, that in every pace he accommodated the elevation of his feet exactly to the elevations of surface they were to pass over; but it was with a kind of frightful nicety to the observer. On the same ground, many high actioned horses, from inattention to the matters on it, might have tripped by meeting any unusual rising; or, by placing one of the feet on a rolling stone, might have fallen altogether. But it is not hence meant to argue, that the most careful hackney, which does not naturally elevate his feet, is a desirable one. Horses, it is true, are in a great degree crepuscular, and see in a very moderate light. But would such a horse be safe to ride at a brisk trot along an uneven road in a dark night? Or even in a long day, might not fatigue bring his feet down without his usual caution?

The fore-hand of the hackney, therefore, should be elevated, and his shoulder by all means must be oblique; so that he may not only lift up his feet, but also ride pleasantly and lightly in hand, as it is termed by horsemen. To which latter valuable quality it is also essential that he have a neck of just proportions, and that his head be particularly well placed on it, so as to afford him room for flexing himself to the action of the bridle, which, in the hands of a good rider, will sometimes constrain him to throw himself on his haunches, and at others to carry himself forward for more speedy progression. The remainder of the fore limbs ought to present a perfectly vertical line to the pastern, which should have such length and obliquity, and such only, as shall bring the toe directly under the point of the shoulder. The body should be circular, neither long nor very short; his saddle-placing good, his flank on a plane nearly with the rest of his carcass, his loins wide, and his croup gently curved only, to allow of a graceful setting on of the tail. From hence downwards, the principles already laid down when treating on the exterior formation generally, will apply; particularising only, that for this variety of horse a good foot ought never to be dispensed with. Height is not so essential in the hackney as in the hunter; it need never to exceed fifteen hands two inches: in most cases it may, with more propriety, range between fourteen hands three inches, and fifteen hands one inch. Altogether, his frame should be compact, without being in the least clumsy; and with this form, the more breeding he shows, short of full blood, the better.—*Blaine.*

Roan, *a.* Bay or sorrel, with grey or white spots interspersed.

The roans, of every variety of colour and form, are composed of white mixed with bay, or red, or black. In some it seems to be a natural mixture of the colours; in others it appears as if one colour was powdered or sprinkled over another. They are pretty horses for ladies or light carriages, and many of them easy in their paces, but they do not usually display much blood, nor are they celebrated for endurance. If they should have white fore legs, with white hoofs, they are too often tender-footed, or become so with even a little hard work.—*The Horse.*

Roar, *v.* To cry as a lion or other wild beast; to cry in distress; to sound as the wind or sea; to make a loud noise.

Roaring, *s.* A disease in horses.

The causes of roaring, which I shall here use as a type of the whole, are remote and proximate. The remote causes are mostly inflammation, acute or chronic, in the tracheal tube itself. Occasionally it is brought on by the effects of inflammation on other parts, as

of the salivary glands in strangles, or of those abscesses which not unfrequently occur in violent catarrh in the vicinage of the pharynx. Structural alteration in the lungs, as hepatisation, has occasioned it (*Percivall's Lectures*, vol. ii. p. 256). Obstructions accidentally formed by exostoses, cicatrisations, &c., or extraneous substances lodged in the cavities leading to the trachea, may any of them occasion it. Barriere notices a case of roaring dependent on the lodgment of a piece of riband within one of the nasal fossæ; and Godine another, brought on by a displaced molar tooth. The proximate cause might, with propriety, include these accidental obstructions, but they are mainly to be looked for in an extravasation, partial or extensive, of coagulable lymph; which, becoming organised, forms a permanent obstruction. When it is extensively spread over the larynx, it produces wheezing; when it constringes the rimaglottis, a whistling sound is the consequence, and is often heard in our own respirations under catarrh, or in the ordinary respirations of some asthmatic persons. Whoever has handled the throats of many old horses, must have observed the hardened state of the larynx, which almost resisted all attempts to what is termed 'cough them.' This ossification of the laryngeal cartilages is not an uncommon cause; and a similar state in the cartilages of the trachea is productive of it also. A very common case also of roaring is a band of lymph stretched across the tracheal tube; at others, an internal ring of the same matter simply diminishes its diameter. The obstruction is sometimes so considerable as to excite piping or roaring on the slightest exertion; in general cases, however, roaring is only exerted when forcible inspirations and expirations are made; for it is, I believe, equally produced by the one as by the other. Mechanical obstructions to free respiration may eventually be productive of roaring: the custom of tightly reining in our carriage-horses, there is reason to think, produces it often; and Mr. Sewell is of opinion, that the practice of using tight throat-lashes, or neck-straps, may lead to it. In furtherance of which opinion, it may be recollected, that horsemen have a very general supposition that crib-biting ends in roaring, in thick wind, or in broken wind: may not the tight collar-strap also here tend to the former of these affections? The custom of 'coughing' horses, and so frequently as it is practised in fairs, may be readily supposed as a cause. A horse passes from fair to fair, having his unfortunate throat brutally pinched thirty or forty times each day. Is it to be wondered at if inflammation take place, and adhesive deposit follow?

The treatment must be regulated by circumstances, but the principal indication is to remove the remote causes in the early stages, and to obviate the effects in the latter. If active inflammation be going on, bleed and blister; and if tumefaction of the neighbouring parts have occasioned it, attempt their reduction. Elevate the head as much as may be. Mr. Sewell recommends a seton in the neighbourhood of the obstruction when known; and in desperate cases he observes, that tracheotomy has been performed with considerable advantage; but the extreme difficulty of detecting the exact situation of the obstruction, will prevent its being generally adverted to.—*Blaine.*

Rock Pigeon, *s.* (*Columba livia*, Brisson.)

Ornithologists seem to differ in opinion concerning the rock and stock pigeon; though it appears almost impossible to conceive them a distinct species. In those described under such names there seems to be so much similitude, except what may be expected from a species half reclaimed, and frequently returning to their natural wild habits again, that we cannot but consider them as one and the same species.

The rock dove is considered to be the origin of our tame pigeons, as it is said to possess the white on the lower part of the back, in which part the stock dove is described to be ash-coloured, and that this last is rather larger. But these variations we have observed in pigeons killed in their native haunts amongst the rocks on our coasts; and our dove-cote pigeons frequently have no white on the back. It is therefore probable many of our common species, after having been bred in a pigeon-house contiguous to such rocky situations, return to their natural habits, and there produce some variation in colour.

The bird now before us we killed on the cliffs in Cauldy Island, in South Wales. It weighed eleven ounces; length thirteen inches and a half; breadth twenty-two; the bill is brown, inclining to purplish-red; point dusky; irides light yellow; the head dark bluish ash-colour; neck and breast glossed with green and copper, as viewed in different lights, most conspicuous on the sides and back of the neck; the upper part of the back and wing coverts pale ash-colour; across the middle of the greater coverts is a broad band of black, and another of the same on the ends of the secondary quills, running into each other on those feathers nearest the body; the greater quills are dusky, dashed with ash-colour, the outer ones darkest, and all of them most so towards the tips, slightly edged on

their exterior webs with white; the lower part of the back white; the rump and tail dark bluish ash-colour, the ends of the latter black; the two exterior feathers whitish on the outer webs towards the base; the sides under the wings, and under wing coverts, white; the belly bluish ash-colour; legs red.

These birds have sometimes appeared in prodigious flocks in winter, frequenting our beech woods for the sake of the mast or seed of that tree. These flights, however, are less numerous and less frequent of late years. Sometimes they are seen in company with our common pigeons, at the barn doors, in severe winters; and are said to be known by their inferior size and darker colour.

* * *

The only place where I have ever seen the rock dove in a wild state, was at Howford, near Mauchlane, in Ayrshire, where two or three pairs nestled on the cliffs of the romantic rocks overhanging the river, but in situations so inaccessible, that I never knew them robbed by the most daring boys. It would be hard to say whether these had strayed from some neighbouring dove-cote, or had originally come thither from some wild brood; though the former is not so probable, as instances, I believe, are rare, of domestic pigeons voluntarily deserting their birth place.—*Montagu—Rennie.*

Rock-doe, *s.* A species of deer.

Rocksalt, *s.* Mineral salt.

Rocket, *s.* An artificial firework.

Rod, *s.* A long twig; anything long and slender; an instrument for measuring; an instrument of correction made of twigs; an implement for angling.

The wood for fishing rods should be cut about Christmas (and some insist that if left in the open air for twelve months afterwards it will season better, than if stowed in a dry place). Hazel is the wood generally procured for this purpose, and of all the sorts that of the cob-nut grows to the greatest length, and is, for the most part, straight and taper; the butt-end should rather exceed an inch in diameter; but of whatever wood the rod is composed, the shoots for stocks, middle pieces, and tops, must be of proper size, well-grown, and as free from knots as possible. The tops should be the best rush-ground shoots, without knots, and proportionally taper; the excrescent twigs are to be cut off, but not close, for fear of hurting the bark, which ought never to be touched with a knife or rasp; for, although they will dress neater, it considerably weakens them: these pieces are to be kept free from wet until the beginning of the following autumn, when such as are wanted to form a rod should be selected, and, after being warmed over a gentle fire, set as straight as possible, and laid aside for two or three days, when they must be rubbed over with a piece of flannel and linseed oil, which will polish and fetch off any superfluous bark; they are then to be bound tight to a straight pole, and so kept until the next spring, when they will be seasoned for use; some, however, prefer keeping them from eighteen months to two years, before they are made up); they are then to be matched together in just proportion, in three, four, or more parts, according to the width of the water, or the wish of the maker; taking care that the different joints fit so nicely, if ferruled, that the whole rod may move as if it were but one piece. If the parts are not ferruled, observe, that they must be cut to join each other with the utmost exactness, and neatly spliced with glue, boiled very gently in strong quick lime-water, keeping it stirred until it becomes smooth and all alike, and then are to be whipped over the glued part with waxed thread.

* * *

Elder, holly, yew, mountain ash, and hip briar, are all natives; the former, prepared as follows, is by some thought to excel any of the latter; a branch of the elder tree of three years' growth is to be cut about the third week in November; it is then with a saw to be separated at every joint; sometimes, when the branch is exactly straight, a length of two joints may be made, for the two shoots which spring from each joint grow alternately from the different sides; these double lengths should be taken from the biggest end of the branch, and will be near three quarters of a yard long; one of these will make the thick end of the top; the other joints are split into four, shaving off the bark and the pith, and every joint tied by itself; the thick end of every piece should be placed towards the butt of the rod; after being split, the pieces should be tied together, and kept a year at least to season; when wanted, they should be first planed and rasped taper, and square; the edges then filed off exactly round and smooth; the splice must be rubbed very thin with shoemakers' wax, filling the outside of the joint so, that when wrapped close with fine white silk, the splice may not be bigger than the joint is,

an inch above it. The hip briar is easily found in hedges of old inclosures, which have not been plashed for many years; but it should be thoroughly seasoned before it is split, or the small pieces will be apt to warp in drying; it is cut into lengths of eight or ten inches for tops, spliced or glued together; after which they are properly tapered with planes and fine rasps, finished off with sandpaper, and the joints wrapped with silk well waxed; a small piece of whalebone is added to the wood, spliced and wrapped in a similar manner; to this finish, however, some gentlemen object, and wonder at the prevalent custom of loading rods with eight or ten inches of whalebone at the top, since that particular part should be light and elastic; and they contend, that the whalebone is dull, heavy, and much too flexible; the Scotch fishing rod makers use tortoise shell at the end of their tops, and it is lighter and springs better than whalebone.

* * *

The reed or cane rod, on account of its lightness and elasticity, is the best for fishing at the bottom, whether with a running line or float, especially when angling for those fish which bite tenderly, as roach and dace; of these some are contrived to go into the butt, and make a walking stick, others are composed of many short joints; all of which are inclosed in a bag. The tackle shops have a variety of these; but in purchasing a reed or cane rod, be careful that it strikes well, and that the bark which grows round the joints, is not rasped into; a very common fault which the rod makers are guilty of; and the consequence of which is, that it is thereby rendered weaker at the joints than elsewhere, and there being no bark to repel the wet, it soon rots, and whenever a large fish is hooked, certainly breaks. Another thing to be observed is, that the medium between the ferrule and the joint that goes in, is not cut too fine; if it is, and a good fish is struck, it is odds but a part of the rod, line, and fish, are all lost together.

* * *

The rod composed of the hazel will not do for fly-fishing, the least wet being apt to warp and render it crooked.

* * *

Another rod for fly-fishing, is recommended to be of two parts, without ferrules, and the lower longer than the upper, with the small end of the former, and the large end of the latter, cut long, and to fit nicely as for splicing; it may be tied together at the water side with common shoemakers' common waxed thread; this is by far the best, for throwing the line with freedom and accuracy; and for easing it in playing the fish when hooked, the spring will be superior, if properly made, to that of the other sort of rods: upon leaving off fishing the rod should be untied, and the string wrapped round the two parts, for carrying it more conveniently.

* * *

Yew, especially the white of it, makes a fine top, and the best forest yew is to be got in Wales; but unless very well chosen, frequently turns out brittle, from its numerous knots. Holly is liable to the same objection; all kinds of wood should be cut in winter when the sap is descended into the root, and kept a year or two, oiling them now and then with linseed oil, and placing them in such a position, that they acquire no bend, which should they do, it may be rectified by holding them over a gentle fire. Of foreign woods, the hiccory from America, will work into handsome and good tops; but the bamboo, or hollow cane, from the West Indies, is to be preferred; in making a top of the latter, care should be taken to preserve the outside, that being its most elastic part; at the extremity of all tops, there should be a loop of hair or a ring for fastening the line to.

* * *

A rod of twelve feet, unless the wind be extremely unfavourable, will cast a fly-line of fourteen yards, but if it is to carry a reel line, fourteen feet will be preferable; it is useless to encumber yourself with an unnecessary weight of wood, as the great advantage of a light rod is, that with either hand you can use it, and thus be enabled to cast your fly under bushes, hollow banks, &c., where the best trout generally lie, without endangering the tackle; the shorter the joints, of course it will be more portable, but the fewer there are, the better it will open a fly line.

* * *

The great defect in most rods is, that the play is in the middle, owing to that part being too weak, and like a waggon whip; with a rod of this kind, it is impossible to strike or command a fish of any size.

* * *

Rods should not be kept in too dry a room; the practice of steeping them in water before using, is bad, and will soon spoil them; the rubbing the tops with sweet oil twice or thrice in the season will preserve them in a serviceable state, and if the rod be hollow, tie a rag to the end of a stick, dip it in linseed oil, and rub it well about the inside of the different joints.—*Daniel.*

Roe, *s.* A species of deer; the female of the hart; the eggs of fish; that of the male fish is called the soft or melt; that of the female the hard or spawn.

ROLLER, *s.* Anything turning on its own axis, as a heavy stone to level walks; bandage; in saddling, the broad fillet, with two or more straps and buckles to secure the saddle or sheet.

ROLLYPOOLY, *s.* A corruption of *roll ball into the pool,* a sort of game, in which when a ball rolls into a certain place it wins.

ROOD, *s.* The fourth part of an acre in square measure; a pole, a measure of sixteen feet and a half in long measure.

ROOK, *s.* A bird resembling a crow; it feeds not on carrion but grain; a piece at chess.

This bird is about the size of the carrion crow, and, except its more glossy plumage, very much resembles it. The base of the bill and nostrils, as far as the eyes, is covered with a white scabrous skin, in which it differs from all the rest, occasioned, it is said, by thrusting its bill into the earth in search of worms; but as the same appearance has been observed in such as have been brought up tame, and unaccustomed to that mode of subsistence, we are inclined to consider it as an original peculiarity. We have already had occasion to observe, that they are useful in preventing a too great increase of that destructive insect the chafer, or dor-beetle, and thereby make large recompense for the depredations they may occasionally commit on the corn-fields. Rooks are gregarious, and fly in immense flocks, at morning and evening, to and from their roosting places, in quest of food. During the breeding time they live together in large societies, and build their nests on trees close to each other, frequently in the midst of large and populous towns. These rookeries, however, are often the scenes of bitter contests; the new-comers are frequently driven away by the old inhabitants, their half-built nests torn in pieces, and the unfortunate couple forced to begin their work anew, in some more undisturbed situation. Of this we had a remarkable instance in Newcastle: in the year 1783, a pair of rooks, after an unsuccessful attempt to establish themselves in a rookery at no great distance from the Exchange, were compelled to abandon the attempt. They took refuge on the spire of that building, and although constantly interrupted by other rooks, built their nest on the top of the vane, and brought forth their young, undisturbed by the noise of the populace below them; the nest and its inhabitants turning about with every change of the wind. They returned and built their nest every year on the same place, till 1793, soon after which the spire was taken down.

* * *

The minute description of rooks is needless; the rooks may always be known from the carrion crow, by their being in flocks, whereas the crows go only in pairs; and also by the white colour of the bill, and from their being bare of feathers upon that part in which the crow is well clothed.

The rook is a gregarious bird, being sometimes seen in numbers so as almost to darken the air in their flight, which they regularly perform morning and evening, except in the breeding time, when the daily attendance of both male and female is required for incubation, or feeding the young; and it is observed they do both alternately. They begin to build in March; one bringing materials, while the other watches the nest, lest it should be plundered by its brethren: they lay five or six eggs, of a pale green colour, marked with small brownish spots. After the breeding season, rooks forsake their nest-trees, going to roost elsewhere; but return to them in August, and again in October, when they repair their nests. The young birds are very good when skinned, steeped in milk, and afterwards put into a pie. Hawker recommends cold water instead of milk.

* * *

There is one trait in the character of the rook which is, I believe, peculiar to that bird, and which does him no little credit; it is the distress which they exhibit when one of them has been killed or wounded by a gun, while they have been feeding in a field or flying over it. Instead of being scared away by the report of the gun, leaving their wounded or dead companion to his fate, they show the greatest anxiety and sympathy for him, uttering cries of distress, and plainly proving that they wish to render him assistance, by hovering over him, or sometimes making a dart from the air close up to him, apparently to try and find out the reason why he did not follow them.

"While circling round and round,
They call their lifeless comrade from the ground."

If he is wounded, and can flutter along the ground, the rooks appear to animate him to make fresh exertions by incessant cries, flying a little distance before him, and calling to him to follow them. I have seen one of my

labourers pick up a rook so wounded, which he shot at for the purpose of putting him up as a scare-crow in a field of wheat; and while the poor wounded bird was still fluttering in his hand, I have observed one of his companions make a wheel round in the air, and suddenly dart past him so as almost to touch him, perhaps with a last hope that he might still afford assistance to his unfortunate mate or companion. Even when the dead bird has been hung, *in terrorem*, to a stake in the field, he has been visited by some of his former friends, but as soon as they found that the case was hopeless, they have generally abandoned that field altogether.

When one considers the instinctive care with which rooks avoid any one carrying a gun, and which is so evident, that I have often heard country-people remark that they can smell gunpowder, one can more justly estimate the force of their love or friendship in thus continuing to hover round a person who has just destroyed one of their companions with an instrument, the dangerous nature of which they seem fully capable of appreciating.

Rooks are not easily induced to forsake the trees on which they have been bred, and which they frequently revisit after the breeding season is over. This is shown in Hampton Court Park, where there is an extensive rookery among the fine lime-trees, and where a barbarous and unnecessary custom prevails of shooting the young rooks. As many as a hundred dozen of them have been killed in one season, and yet the rooks build in the avenue, though there is a corresponding avenue close by in Bushy Park, which they never frequent, notwithstanding the trees are equally high and equally secure. I never hear the guns go off during this annual slaughter without execrating the practice, and pitying the poor rooks, whose melancholy cries may be heard to a great distance, and some of whom may be seen, exhausted by their fruitless exertions, sitting melancholy on a solitary tree waiting till the sport is over, that they may return and see whether any of the offspring which they have reared with so much care and anxiety are left to them; or, what is more probable, the call for assistance of their young having ceased, they are aware of their fate, and are sitting in mournful contemplation of their loss. This may appear romantic, but it is nevertheless true; and whoever, like myself, has observed the habits and manners of the rook, and witnessed their attachment to each other and to their young,—and is convinced, as I am, that they have the power of communication by means of a language known to themselves, and are endowed with a knowledge and foresight most extraordinary, will take as much interest in them as I have confessed that I do. * * *

A gentleman in this neighbourhood had two milk-white rooks in one nest. A booby of a carter, finding them before they were able to fly, threw them down, and destroyed them, to the regret of the owner, who would have been glad to have preserved such a curiosity in his rookery. I saw the birds myself nailed against the end of a barn, and was surprised to find that their bills, legs, feet, and claws were milk-white.

* * *

Passage hawks are also used for rooks. These birds sometimes mount like herons, but their flight is in general much lower. They must be found in an open country; and the wood, which is their place of retreat, must be so situated as to oblige them to fly against the wind to gain in.—*Bewick—Daniel—Jesse—White's Selborne—Sebright.*

Rookery, *s.* A nursery of rooks.

Roost, *s.* That on which a bird sits to sleep; the act of sleeping.

Roost, *v.* To sleep as a bird.

Rope, *s.* A cord, a string, a halter.

Ropy, *a.* Viscous, tenacious, glutinous.

Rosin, *s.* Inspissated turpentine.

Rosin, *v.* To rub with rosin.

Rostrum, *s.* The beak of a bird; the beak of a ship. *Rostrum cultratum* (Linn.), in ornithology, is a term used when the edges of the bill are very sharp, as in that of the crow. When the bill is notched near the tip, as in shrikes, thrushes, &c., it is called by Linnæus *rostrum emarginatum.*

Rot, *v.* To make putrid, to bring to corruption.

ROT, *s.* A distemper among sheep in which their lungs are wasted; putrefaction; putrid decay.

ROTARY, *a.* Whirling as a wheel. A motion peculiar to the flight of the hawk tribe.

ROUGE ET NOIR, *s.* A game.

Rouge et noir, or red and black, is a modern game, so styled, not from the cards, but from the colours marked on the tapis or green cloth with which the table is covered.

The first parcel of cards played is usually for noir, the second for rouge, though sometimes the cards are cut to determine which shall begin. All the terms of this game are French, and that language is used in playing. Any number of persons may play, and the punters may risk their money on which colour they please, placing the stakes in the outer semicircle; but after the first card is turned up, no other stakes can be laid for that coup.

The tailleur and croupier seat themselves opposite each other, with a basket for receiving the cards of every coup after dealing, which is placed on the middle of the table. The tailleur then passing round six packs of cards to be shuffled and mixed confusedly all together by the company, afterwards finally shuffles them, and inserts all the end cards into various parts of the 312, till he meets with an honour, which being placed upright at the end, is offered to a punter, who, putting the same into any part of the pack, the tailleur there separates it, and lays that part which was below the said honour uppermost, and taking therefrom a handful of cards, and placing a weight upon the remainder, proceeds to deal, taking afterwards other parcels from the heap as they may be wanted, till all are dealt out. He looks at the first card, and puts its face downwards; two others, one red, the other black, are then laid back to back, and that placed conspicuously uppermost which is of a similar colour with the first card; these two cards are turned according to the colour of the card which afterwards may be first dealt in each succeeding coup. When the stakes are deposited, the tailleur cries noir, turns the top card, and places each succeeding one in a row, till the points of those so turned shall exceed thirty; he then declares the numbers at trente and une, one and thirty; or, if above that, up to forty he only says, deux, trois, quatre, cinq, six, sept, huit, neuf, two, three, four, five, six, seven, eight, nine, and when forty, quarante.

Another parcel is then dealt in a similar mode for rouge, and the punters win who had staked on that colour, the points for which were thirty-one or nearest to it, which the tailleur declares, by saying rouge gagne, red wins; or rouge perd, red loses. These two parcels, one for each colour, make a coup. When the same number is dealt for each, the tailleur says, apres, after, which forms un refait, or doublet, by which neither party loses, except it is un refait trente et un, one-and-thirty, when the tailleur wins half the stakes punted on each colour, which half the punters may either pay, or have their stakes moved into the middle semicircles of the colour they then choose, called la première prison, the first prison, to be determined by the next event, whether they lose all or are set at liberty; but if un refait second trente and un, a second doublet of one and thirty, should occur in the next succeeding deal, the punters lose only one half of their remaining moiety, making three-fourths of their original stakes, and are removed into the smallest semicircle, styled la seconde prison, the second prison, and the next coup determines whether the punter loses all, or is to be removed again into la première prison.

Punters after winning may paroli, &c., and pursue their luck up to a soixante, as at faro; but as no livrets are used at rouge et noir, they cannot make either paix or pont.

At this game a banker cannot refuse any stake not exceeding his fund; which the punter declares, by saying je va la banque, va la banque, or va banque, I aim at the bank. Bankers generally furnish punters with slips of card paper, ruled in columns, each marked N. or R. at the top on which accounts are kept by pricking with a pin, and when un refait happens, the same is denoted by running the pin through the middle line. Some bankers give up the profit of le refait during the first deal.

The odds against le refait being deals, are reckoned sixty-three to one, but bankers expect it twice in three deals, and there are generally from twenty-nine to thirty-two coups in each deal.—*Hoyle.*

ROUGHRIDER, *s.* One that breaks horses for riding.

ROUSING, *s.* The action of a hawk when she shakes herself.

ROW, *v.* To impel by oars. To use the oar.

ROWEL, *s.* The points of a spur turning on an axis; a seton, a roll of hair

or silk put into a wound to hinder it from healing, and provoke a discharge.

Rowels are seldom so convenient or so useful as setons. They are formed by making an incision in the skin, where it is rather loose, as in the chest, about an inch in length. This being done, the finger is to be introduced, or an instrument called a cornet, that is, the crooked end of a small horn made for the purpose, and the skin separated from the parts underneath all around for the space of about an inch. Into the cavity thus made a round piece of leather, with a hole in the middle, wrapped in tow and smeared with digestive ointment, is to be introduced. The orifice in the skin is then to be plugged up with tow, and kept there until suppuration takes place, that is, four or five days. The tow is then to be taken out, when a great deal of matter will flow from the orifice. The rowel is afterwards to be moved daily and kept clean.—*White.*

ROWEL, *v.* To pierce through the skin, and keep the wound open by a rowel.

ROWER, *s.* One that manages an oar.

RUB, *v.* To clean or smooth anything by passing something over it; to scour, to wipe; to move one body upon another; to remove by friction; to touch hard; to rub down, to clean or curry a horse.

RUBBER, *s.* One that rubs; the instrument with which one rubs; a coarse file; a game, a contest; two games out of three.

RUD, *s.* A fish.

The body of the rud is broader than the carp, more like that of the bream, but much thicker; the head is small, the palate and teeth like the carp, on the covers of the gills are spots of a blood colour; the irides are yellow, varying in some almost to redness; the nostrils large, and by some said to be double on each side; the back is arched, sloping off suddenly at the two extremities; the scales are very large, like the carp; the side line is slightly incurvated: the back is of an olive; the sides and belly are of a gold colour, with certain red marks; the ventral, anal fins, and the tail (which is forked), are generally of a deep red, and the dorsal fin is darker than the rest; the usual length of this fish is from ten to sixteen inches. It lives on insects and grass, and is preyed on by the voracious fish and the anseres. In rivers the rud's haunts are in deepish gentle streams and deep still water, where the bottom is a kind of slimy mud sand, or fine gravel, and also among weeds.

They are always in season, except at the time of spawning, which is in April, when the male fish have small white spots about their heads, and the scales of both sexes feel more rough; they swim in shoals, casting their spawn upon and among the aquatic plants, to the number according to the Elements of Natural History, of 91,000 ova.

Their flesh is exceedingly wholesome, and holds a distinguished rank for its fine flavour; but they are very scarce.

Mr. Pennant believes the shallow of the Cam, which grows to the length of thirteen inches, and spawns in April, to be no other fish than the rud.

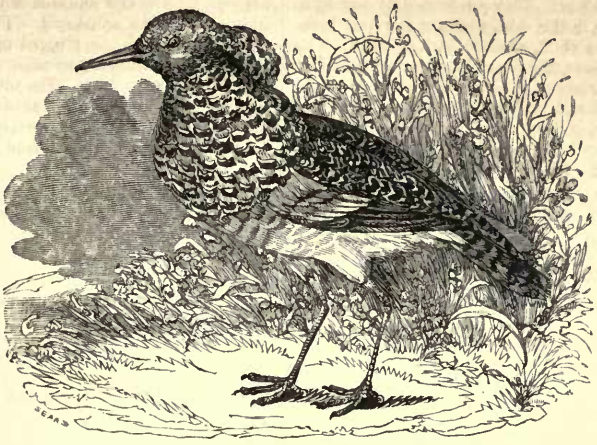
The angler will find the rud worth his attention; the tackle must be strong, but fine, with a quill float, and a hook proportioned to the bait; the same ground-bait is to be used as for carp and chub, fishing about the same depths as for the latter, except on the ground, for they feed naturally near the surface; they will in this way take red-worms, gentles, wasp-maggots, caddis, and red-paste. Some use a ground-bait of boiled malt, and prefer a small red worm to any other bait. In fishing among weeds, have neither float nor shot, and let the worm, or other bait sink a little under water: at top they are taken either with natural or artificial flies, by whipping with a long, and dibbing or bobbing with a short line. In warm, bright weather, the rud will bite early and late; when coolish, the fore and afternoons; and in winter, the middle of the day; when hooked this fish struggles hard, and requires time in landing, and is so tenacious of life, as to retain it after being taken out of the water a considerable time.—*Daniel.*

RUBY, *a.* Of a red colour.

RUDDOCK, *s.* A kind of bird.

RUDDY, *a.* Approaching to redness, pale red; yellow.

Ruff, *s.* A puckered linen ornament formerly worn about the neck; a bird.



The male of this curious species is called the ruff, and the female the reeve: they differ materially in their exterior appearance; and also, what is remarkable in wild birds, it very rarely happens that two ruffs are alike in the colours of their plumage. The singular, wide-spreading, variegated tuft of feathers which, in the breeding season, grows out of their necks, is different in all. The tuft, or ruff, a portion of which stands up like ears behind each eye, is in some black, in others black and yellow, and in others again white, rust colour, or barred with glossy violet, black and white. They are, however, more nearly alike in other respects: they measure about a foot in length, and two in breadth, and when first taken weigh about seven ounces and a half; the female seldom exceeds four. The bill is more than an inch long, black at the tip, and reddish yellow towards the base; the irides are hazel: the whole face is covered with reddish tubercles, or pimples; the wing coverts are brownish ash colour; the upper parts and the breast are generally marked with transverse bars, and the scapulars with roundish-shaped glossy black spots, on a rusty coloured ground; quills dusky; belly, vent, and tail coverts white; the tail is brown; the four middle feathers of it are barred with black; the legs are yellow. The male does not acquire the ornament of his neck till the second season, and, before that time, is not easily distinguished from the female, except by being larger. After moulting, at the end of June, he loses his ruff and the red tubercles on his face, and from that time until the spring of the year, he again, in the plumage, looks like his mate.

These birds leave Great Britain in the winter, and are then supposed to associate with others of the tringa genus, among which they are no longer recognised as the ruff and reeve. In the spring, as soon as they arrive again in England, and take up their abode in the fens where they were bred, each of the males (of which there appears to be a much greater number than of the females) immediately fixes upon a particular dry and grassy spot in the marsh, about which he runs round and round, until it is trodden bare; to this spot, it appears, he wishes to invite the female, and waits in expectation of her taking a joint possession, and becoming an inmate. As soon as a single female arrives, and is heard or observed by the males, her feeble cry seems as if it roused them all to war, for they instantly begin to fight, and their combats are described as being both desperate and of long continuance: at the end of the battle she becomes the prize of the victor. It is at the time of these battles that they are caught in the greatest numbers in the nets of the fowlers, who watch for that opportunity: they are also, at other times, caught by clap, or day-nets, and are drawn together by means of a stuffed reeve, or what is called a stale bird, which is placed in some suitable spot for that purpose.

The ruff is highly esteemed as a most delicious dish, and is sought after with great

cagerness by the fowlers, who live by catching them and other fen birds for the markets of the metropolis, &c. Before they are offered for sale, they are commonly put up to feed for about a fortnight, and during that time fed with boiled wheat, and bread and milk mixed with hempseed, to which sugar is sometimes added: by this mode of treatment they become very fat, and are often sold as high as two shillings and sixpence each. They are cooked in the same manner as the woodcock.

The female, in the beginning of May, makes her nest in a dry tuft of grass in the fens, and lays four white eggs, marked with rusty spots.

These birds are common in the summer season in the fens of Denmark, Sweden, and Russia, and are also found in other more northern regions, even as far as Iceland.

The trade of catching ruffs is confined to a very few persons. They live in obscure places on the verge of the fens, and are found out with difficulty; for few, if any birds, are ever bought, but by those who make a trade of fatting them for the table; and they sedulously conceal the abode of the fowlers; so much so, that by no art could we obtain from any of them where they resided; and in order to deceive us, after evading our entreaties, they gave us instructions that led us quite a contrary direction. The reason of all this was obvious; for after much labour and search in the most obscure places, (for neither the innkeepers, nor other inhabitants of the towns, could give any information, and many did not know such a bird was peculiar to their fens,) we found out a very civil and intelligent fowler, who resided close to Spalding, at Fengate, by name William Burton (we feel a pleasure in recording his name, not only from his obliging nature, but for the use of others in similar pursuits); and, strange to say, that although this man had constantly sold ruffs to Mr. Towns, a noted feeder, hereafter more particularly noticed, as also to another feeder at Cowbit, by the name of Weeks, neither of those persons could be induced to inform us even of the name of this fowler. The reason, however, was evident, and justly remarked by Burton, for he obtained no more than ten shillings per dozen, whereas Weeks demanded thirty shillings for the like number he had the same day bought of Burton. The season was far advanced, and we were obliged to buy some at that price of Weeks, for Burton could not then catch us as many as were required.

At this time we were shown into a room where there were about seven dozen males and a dozen females, and of the former there were not two alike. This intrusion to choose our birds, drove them from their stands, and compelling some to trespass upon the premises of others, produced many battles.

By this feeder we learned, that two guineas a dozen was now the price for fattened ruffs; and he never remembered the price under thirty shillings, when fit for table.

Mr. Towns, the noted feeder at Spalding, assured us his family had been a hundred years in the trade, and boasted they had served George the Second, and many noble families in the kingdom. He undertook, at the desire of the late Marquess of Townsend, when that nobleman was Lord Lieutenant of Ireland, to take some ruffs to that country, and actually set off with twenty-seven dozen from Lincolnshire; left seven dozen at the Duke of Devonshire's, at Chatsworth; continued his route across the kingdom, to Holyhead; and delivered seventeen dozen alive in Ireland; having lost only three dozen in so long a journey, confined and greatly crowded as they were in baskets, which were carried upon two horses.

The manner of taking these birds is somewhat different in the two seasons; in the spring, the ruffs hill, as it is termed; that is, they assemble upon a rising spot of ground, contiguous to where the reeves propose to deposit their eggs; there they take their stand, at a small distance from each other, and contend for the females; the nature of polygamous birds. This hill, or place of resort for love and battle, is sought for by the fowler, who, from habit, discovers it by the birds having trodden the turf somewhat bare, though not in a circle as usually described.

When a hill has been discovered, the fowler repairs to the spot before the break of day, spreads his net, places his decoy birds, and takes his stand at the distance of about one hundred and forty yards, or more, according to the shyness of the birds.

The net is what is termed a single clap-net, about seventeen feet in length, and six wide, with a pole at each end; this, by means of uprights fixed in the ground, and each furnished with a pulley, is easily pulled over the birds within reach, and rarely fails taking all within its grasp; but in order to give the pull the greatest velocity, the net is, (if circumstances will permit) placed so as to fold over with the wind: however there are some fowlers, who prefer pulling it against the wind for plovers. As the ruffs feed chiefly by night, they repair to their frequented hill at the dawn of day, nearly all at the same time, and the fowler makes his first pull according to circumstances, takes out his birds, and prepares for the stragglers who traverse the fens, and who have no adopted hill; these are caught singly, being enticed by the stuffed birds.

Burton, who was before mentioned, never

used anything but stuffed skins, executed in a very rude manner; but some fowlers keep the first ruffs they catch for decoy birds; these have a string of about two feet long tied above the knee, and fastened down to the ground. The stuffed skins are sometimes so managed as to be moveable by means of a long string, so that a jerk represents a jump, (a motion very common amongst ruffs, who at the sight of a wanderer flying by, will leap or flirt a yard off the ground,) by that means inducing those on the wing to come and alight by him.

The stuffed birds are prepared by filling the skin with a whisp of straw tied together, the legs having been first cut off, and the skin afterwards sewed along the breast and belly, but with no great attention to cover the straw beneath: into this straw a stick is thrust, to fix it into the ground, and a peg is also thrust through the top of the head, and down the neck into the stuffing or straw body, and the wings are closed by the same process. Rough as this preparation is, and as unlike a living bird as skin and feathers can be made, it answers all the purpose.

When the reeves begin to lay, both those and the ruffs are least shy, and so easily caught, that a fowler assured us he could with certainty take every bird on the fen in the season. The females continue this boldness, and their temerity increases as they become broody; on the contrary, we found the males at that time could not be approached within the distance of musket shot, and consequently were far beyond the reach of small shot.

We were astonished to observe the property that these fowlers have acquired, of distinguishing so small an object as a ruff at such an immense distance, which, amongst a number of tufts or tumps, could not by us be distinguished from one of those inequalities; but their eyes had been in long practice of looking for the one object.

The autumnal catching is usually about Michaelmas, at which time few old males are taken, from which an opinion has been formed that they migrate before the females and young. It is, however, more probable, that the few which are left after the spring fowling, like other polygamous birds, keep in parties separate from the female and her brood till the return of spring. That some old ruffs are occasionally taken in the autumnal fowling we have the assertion of experienced fowlers, but we must admit that others declare none are taken at this season. It must, however, be recollected, that in the autumn the characteristic long feathers have been discharged, and consequently young and old males have equally their plain dress; but the person who assured us that old birds were sometimes taken at that season, declared it was easy to distinguish them from the young of that summer.

It does not appear to be the opinion of fowlers, that the males are more than one season arriving at maturity, because the ruffs taken in the spring, destitute of the characteristic long feathers, which constitute their principal distinction, are comparatively few to those possessing the ruff: the opinion, therefore, that those ruffless males are birds of a very late brood of the preceding season, is a reasonable conjecture.

The long feathers on the neck and sides of the head, in the male, that constitute the ruff and auricles, are of short duration, for they are scarcely completed in the month of May, and begin to fall the latter end of June. The change of these singular parts is accompanied by a complete change of plumage; the stronger colours, such as purple, chestnut, and some others, vanish at the same time, so that in their winter dress they become more generally alike from being less varied in plumage; but we observed that those which had the ruff more or less white, retained that colour about the neck after the summer or autumnal moulting was effected.

The females, or reeves, begin laying their eggs the first or second week in May; and we have found their nests with young as early as the third of June. By this time the males cease to hill.

The nest is usually formed upon a tump in the most swampy places, surrounded by coarse grass, of which it is also formed.

The eggs are (as usual with its congeners) four in number; these are so nearly similar in colour to those of the snipe and redshank, both of which breed in the same wet places, and make similar nests, that some experience is required to discriminate them; they are, however, superior in size to the former, and are known from the latter by the ground being of a greenish hue instead of rufous white; but individuals assimilate so nearly to each other as not to be distinguished, especially as the dusky and brown spots and blotches are similar. The weight of the eggs is from five drachms twenty-five grains, to five drachms fifty grains.—*Montagu.*

Ruffe, *s.* A fish.

The ruffe somewhat resembles a perch, though the form is more slender, and the length rarely exceeds six inches; the teeth are very small, and disposed in rows; it is marked on the jaws with a double course of half circles; the upper part of the eye is of a

dark-brown; the lower part somewhat yellow, and the globe of it black: the first rays of the dorsal fin (which is spotted with black) are like those of the perch, strong, sharp, and spiny; the others soft; the body is covered with rough compact scales; the back and sides are of a dirty green; the last, as well as the belly, inclining to yellow, but both spotted, with the tail marked with transverse bars of black. Their principal spawning-time is the beginning of April, but some are said to spawn again in October; and, in the Elements of Natural History, are said to deposit 75,000 ova. To the young angler the ruffe yields good sport; they associate in great numbers; their haunts are in recluse places, where the water is deep, and runs quietly, with a loamy or muddy bottom, and also in still water; the tackle should be fine, the hook No. 7, and a quill float; the bait (a small, well scoured red-worm) must just run on the ground, and either throw in some clay-balls, with worms, as directed in perch fishing, or if the water be clear, use common mud-balls to colour it; three rods may be easily managed, the baits touching the bottom; when there is a bite, strike directly, for they gorge so hastily, that the disgorger, or a knife, must frequently be used to get out the hook; by thus angling for them, six or eight dozen are often caught at a standing. Either in the spring or summer, with a brisk, warm wind, they will bite all day; and will sometimes in cold weather take the bait very freely. The ruffe, for the delicacy and richness of its flavour, as well as for its being considered very nourishing, is more admired than the perch. They are to be dressed in the same manner.—*Daniel.*

RUFFING, *s.* When the hawk strikes without trussing its prey.

RUM, *s.* A kind of spirit distilled from molasses.

RUMINATE, *v.* To chew over again; to muse on, to meditate over and over again.

RUNNER, *s.* One that runs, a racer; a messenger; a shooting sprig; one of the stones of a mill; a bird.

RUNT, *s.* Any small animal below the natural growth of the kind; a pigeon.

RUPTURE, *s.* The act of breaking, state of being broken; preternatural eruption of the gut.

RUSSET, *a.* Reddishly brown; Newton seems to use it for grey; rustic.

RUSSIAN DOG (*Canis Russianus*), *s.*

This dog is of a large size, being considerably superior, in point of strength, to the Newfoundland dog. He was originally produced by a cross between the Newfoundland

and the Siberian, and has now assumed the characteristics of a distinct race: his head is large, with moderately long ears, and his tail bent over his back, like that of most of the boreal varieties; his hair is very long and curled, being from seven to nine inches in length; and in colour he varies from white with black patches, to pure white, and sometimes is entirely black. He has an expressive and intelligent countenance, and possesses all those qualities for which the Newfoundland dog is famous. In Russia this animal is employed for watching property, which he defends with all the assiduity of a mastiff or Newfoundland dog. He is sometimes also used in hunting the wolf and wild boar, for which he is admirably adapted, from his great strength, and from possessing considerable swiftness. His feet are semi-webbed, and he swims with great ease, and is accordingly often used in shooting aquatic birds, which he fetches out of the water when killed.

The dogs of Russia are not so quarrelsome amongst themselves as the British, probably owing to their never being encouraged to fight: and I am informed by a gentleman who resided twelve years in that country, that he never even heard of a dog fight there.—*Brown.*

Rust, *s.* The red incrustation of iron; the tarnished or corroded surface of any metal.

Rust, *v.* To gather rust; to have the surface tarnished or corroded.

Three ounces of black lead, half a pound of hog's lard, one quarter of an ounce of camphor, boiled upon a slow fire; the gun-barrels to be rubbed with this, and, after three days, wiped off with a linen cloth: twice in a winter will keep off the rust, which the salt-water is otherwise sure to be continually bringing out from the iron.

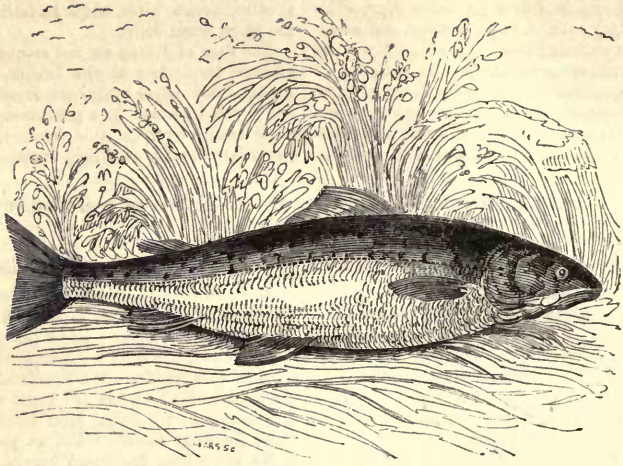
* * * *

To protect guns from rust in the humid climate I have been latterly accustomed to, I found nothing answer well but strong mercurial ointment. On the Western coast, oil, no matter how good in quality, is useless, but for cleaning. Those who are acquainted with the localities of that country know that turf is of trifling value. No limit is consequently placed upon its consumption; it is calculated only by the stack or the boat-full, and hence more fuel was wasted in my lodge, than would supply three moderate houses. Yet so penetrating is the damp from the ocean breeze, that the house-arms rusted above the fire-places, and the pistols I kept upon my table would spot if not frequently examined, and dry-rubbed with a flannel cloth.—*Hawker—Wild Sports.*

Rut, *s.* Copulation of deer; the track of a cart-wheel.

Rye, *s.* A coarse kind of bread corn.

Ryegrass, *s.* A kind of strong grass.



THE SALMON.

SACCADE, *s. obs.* A violent check the rider gives his horse by drawing both the reins suddenly.

SACK, *s.* A bag, a pouch, commonly a large bag; the measure of three bushels; a kind of sweet wine now brought chiefly from the Canaries.

SADDLE, *s.* The seat which is put upon the horse for the accommodation of the rider. SADDLE, *v.* To cover with a saddle; to fix the saddle on.

SADDLEGALL, *s.* An injury on the horse's back, arising from a defective or ill-fitted saddle.

Saddle or harness galls may be considered as bruises, and when it can be done should be poulticed, until the swelling has been dispersed or has suppurated. If the matter has not sufficient vent, the opening may be enlarged or the sinus laid open, if there is any. It must then be dressed with digestive ointment, and when it has been reduced to the state of a clear open sore, the cure may be finished by the astringent paste.—*White.*

SADDLEBACKED, *a.* Horses saddlebacked have their backs low, and a raised head and neck.

SADDLER, *s.* One whose trade is to make saddles.

SAFFRON, *a.* Yellow, having the colour of saffron.

SAGACIOUS, *a.* Quick of scent; quick of thought; acute.

SAGITTAL, *a.* Belonging to an arrow.

SAKERET, *s.* The male of a sakerhawk.

SALINE, *a.* Consisting of salt.

Saliva, *s.* Every thing that is spit up; but it more strictly signifies that juice which is separated by the glands called salival.

Salivate, *v.* To purge by the salival glands.

Dogs, when fully salivated, lose their teeth very early, and their breath continues offensive through life. The whole of the feline tribe are also easily affected by mercury. I was requested to inspect the very large lion that so long graced Pidcock's menagerie. It may be remembered by many, that this noble animal's tongue constantly hung without his mouth; which arose from his having been injudiciously salivated, many years before, by a mercurial preparation applied by the keeper for the cure of mange. The submuriate of mercury (calomel) is, likewise, very irregular in its action on dogs; I have seen eight grains fail to open the bowels of a small one, while, on the contrary, I have been called to a pointer fatally poisoned by ten grains. It forms however, a useful auxiliary to purgatives, in doses of three or four grains; and as it not unfrequently acts on the stomach, so it may be used with advantage as an emetic in some cases, particularly in conjunction with tartarised antimony (tartar emetic). When, therefore, a purgative is brought up again, in which calomel was a component part, it may be suspected to arise from this source, and, if it is necessary to repeat the purge, the mercurial should be omitted.—*Blaine.*

Salmon, *s.* The king of freshwater fish.

At the latter end of the year, and some in November, salmon begin to press up the rivers as far as they can reach, in order to spawn; when that period approaches, and they have accommodated themselves with a fit place, nature supplies the male with a bony excrescence, growing out of the end of the lower jaw, to the length of half an inch or more: this, it is said, aids him in the removal of the gravel, but both male and female assist in forming a proper receptacle for the spawn, in the sand or gravel, about eighteen inches deep. In this the ova and milt are deposited, and carefully covered by the parent fish, who afterwards hasten to cleanse and recover themselves (the male loses the gristle at the jaw); for, after spawning, they become very poor and lean, and then are called kipper. At their first entrance into the fresh water, salmon are observed to have abundance of insects adhering to them, especially above the gills: these animals denote the fish to be in high season, and die and drop off soon after the salmon's leaving the sea.

The spawn lies buried until spring, and, without any other care, is nourished and brought to perfection, if not disturbed by violent floods, or by depredations from other fish, of which the eel, roach, dace, and grayling, are dangerous neighbours. About the latter end of March, the spawn begins to exclude the young, which gradually increase to four or five inches in length, and are then termed smelts, or smouts; about the beginning of May the river seems to be alive, and there is no framing an idea of the numbers without seeing them. A seasonable flood, however, hurries them to the sea, very few being left in the river. About the middle of June the earliest fry commence their return from the sea into the river (at that period from twelve to sixteen inches long), and progressively augment in number and size, until about the end of July, which is, at Berwick, the height of the grilse time (the name there given to the fish of that age). Early in August they lessen in number, but advance in bigness, some being from six to as high as nine pounds' weight. This increase appears surprisingly quick; yet a gentleman of Warrington has given an instance of still more rapid growth: a kipper salmon, weighing seven pounds three quarters, taken on the 7th of February, was marked with scissors on the back fin and tail, and turned into the river; he was again taken on the 17th of the following March, and then weighed seventeen pounds and a half. In this case the remark of Walton seems to have been more than verified, "that the samlet becomes a salmon in as short a time as a gosling becomes a goose."

* * *

The salmon in Lough Erne increase in size wonderfully, and young ones, which were caught and marked when going into the lake, have been caught on their return, and found so large, that they must have increased at the rate of one pound per week.

* * *

The migratory habits of the salmon, and the instinct with which it periodically revisits its native river, are curious circumstances in the natural history of this fish. As the swallow returns annually to its nest, as certainly the salmon repairs to the same spot in which to deposit its ova. Many interesting experiments have established this fact. M. De Lande fastened a copper ring round a salmon's tail, and found that for three successive seasons it returned to the same place. Dr. Bloch states, that gold and silver rings have been attached by eastern princes to salmon, to prove

that a communication existed between the Persian Gulf and the Caspian and Northern Seas, and that the experiment succeeded. Shaw, in his Zoology, mentions that a salmon of seven pounds and three quarters was marked with scissors on the back fin and tail, and turned out on the 7th of February, and that it was retaken in March of the succeeding year, and found to have increased to the amazing size of seventeen pounds and a half. This statement, by the by, is at variance with the theory of Dr. Bloch, who estimates the weight of a five or six year old salmon at but ten or twelve pounds.

That the salmon should lose condition rapidly on quitting the sea for the fresh water, may be inferred from a fact agreed upon by naturalists, that during the period of spawning the fish neglects feeding. In this peculiar habit the salmon is not, however, singular; animals of the Phocæ tribe, in breeding-time, exercise a similar abstinence. On opening a salmon, at any season, no food will be discovered, and the contents of the stomach will be confined to a small quantity of yellowish fluid and tape-worms, which are generated there. Sir Humphry Davy believes that occasionally food may be found. I have seen thousands opened preparatory to being salted, and I never observed anything but this fluid and tape-worms. Another circumstance may be stated as a curious proof of health, as well as of the period of time the salmon has been resident in a river. When the fish leaves the sea, and of course is in its best condition, insects (the Lernæ Salmoneæ of Linnæus) will be perceived firmly adhering to the skin. Immediately on entering the fresh water, these insects begin to detach themselves from the salmon, and after a short time they gradually drop off and disappear.

* * *

Ireland (particularly the north) abounds with salmon; the most considerable fishery is at Crarma, on the river Ban, near Coleraine. (Some account of this fishery is mentioned in the list of the rivers, &c. of this country.) The nets used are eighteen score, or three hundred and sixty yards long, and are continually drawing, night and day, the whole season (nearly four months), two sets of sixteen men each alternately relieving one another. The best drawing is when the tide is coming in.

The salmon are cured by being first split, and rubbed with fine salt; and, after laying in pickle, in great tubs or reservoirs, are packed up with layers of coarse brown Spanish salt, in casks, six of which make a ton. These are exported to Leghorn and Venice.

* * *

Immediately near to Katrineberg, at a hamlet called Deje Forsa, there is a valuable fishery for salmon, ten or twelve thousand of these fish being taken there annually. They are, however, of a small size, the largest of them rarely exceeding twenty pounds in weight; one with another, indeed, they probably do not average more than six or seven pounds a-piece.

These salmon are bred in the Wenern lake, but, in consequence of the considerable cataracts at Deje, they never have access to the sea; from this cause, they are said to be inferior, in point of flavour, to those found in most other rivers.

I subjoin a statement of the numbers taken in eight successive years:—

1820	..	21,817
1821	..	11,751
1822	..	10,103
1823	..	9,823
1824	..	14,313
1825	..	8,884
1826	..	5,800
1827	..	10,500
		92,991
		11,624 average.

* * *

In the river Beaulie, below the falls, is a valuable salmon fishery, and in the months of July and August many of these come to the foot of the falls. When a flood occurs, they endeavour to get up the stream, but as the water in which they swim is constantly agitated and frothy, on account of the height from which it descends, they cannot see before them, often mistake their direction, and leap upon the dry rock. It is a constant practice with the people in the neighbourhood to lay branches of trees along the side of the water, to prevent the fish tumbling back into the river. Twenty salmon have by these means been frequently taken in a morning. The last Lord Lovat is said to have performed a curious experiment here. He made a fire upon the rock, and placed on it a large pot of water; speedily a salmon, making a leap, tumbled into the pot where it was soon boiled, and no doubt eaten. This was done that his lordship might be enabled to boast in the south of the wonders that existed in the Highlands, which were then little known, and to say that in his country provisions abounded so much, that if a fire was made, and a pot set to boil on the banks of the river, the salmon would of themselves leap into the pot to be boiled, without requiring to be caught by a fisherman.

* * *

The fifteenth of February, 1809, Harry Fenn, a fish-salesman at Billingsgate, sold an uncrimped Severn salmon, weighing nineteen pounds, for the immense sum of one guinea per pound to Phillips, the fishmonger in Bond

Street. N.B. It was the only salmon at market.

* * *

La Fontaine gives an anecdote of a gourmand, who having despatched an entire salmon with the exception of the jowl, was taken so ill that the physician pronounced his recovery to be impossible. "Is it so?" said the dying fish-fancier—the doctor gave a desponding nod —"Bring me then the remainder of my salmon."

* * *

Salmon Colour.—Take two ounces of annotto, tie it up in a bag, then throw it into clean cold water, and squeeze it in the rag often, till you melt a quantity of it down; pour off some of this liquor into your dye-pot, put in your stuff and boil it, and if it is pretty red, put in some madder, a little at a time, and if you see it is come to the colour, draw, squeeze out the remainder, put it into your pot, and sparingly add more madder. By using Brazil instead of madder, you will get flesh colour.

* * *

Salmon fishing.—In salmon fishing you must alter your manner of moving the fly. It must not float quietly down the water; you must allow it to sink a little, and then pull it back by a gentle jerk, not raising it out of the water, and then let it sink again till it has been shown in motion, a little below the surface, in every part of your cast.

* * *

Salmon often in this season haunt the streams in pairs; but so far from rising again after being pricked, they appear to me to learn when they have been some time in the river, that the artificial fly is not food, even without having been touched by the hook. In the river at Galway, in Ireland, I have seen above the bridge some hundreds of salmon lying in rapid streams, and from five to ten fishermen tempting them with every variety of fly, but in vain. After a fish had been thrown over a few times, and risen once or twice and refused the fly, he rarely ever took any notice of it again in that place. It was generally nearest the tide that fish were taken, and the place next the sea was the most successful stand, and the most coveted; and when the water is low and clear in this river, the Galway fishermen resort to the practice of fishing with a naked hook, endeavouring to entangle it in the bodies of the fish; a most unartist-like practice. In spring-fishing, I have known a hungry, half-starved salmon rise at the artificial fly a second time, after having been very slightly touched with it; but even this rarely happens, and when I have seen it the water has been coloured.

* * *

I made several unsuccessful casts—"A bad look out, friend Julius; Heaven forefend that the cook has placed any dependence on the angle!" Again I tried the pool, and, like all disappointed fishermen, began to prognosticate a change of weather. "I had remarked mares' tails in the sky yesterday evening, and there was rain over head, for a hundred." My cousin smiled; when suddenly my nebulous speculations were interrupted by a deep sluggish roll at the dropper. "Monamondiaoul!" exclaimed Mortien Beg, as he caught a momentary glance of the broad and fan-like tail, "he is fifteen pound weight!" Obedient to the directions of my Mentor, I left the spot the salmon leaped in, and commenced casting a dozen yards below it. Gradually I came over him again. "A light cast, Frank, and you have him." I tried, and succeeded gallantly. I sent the fly across the water with the lightness of the thistle's down—at the same moment the breeze eddied up the stream, and curled the surface deliciously. A long, dull ruffle succeeded. Whish, span the wheel: wish-h-h-h-h, whish-h-h, whish—I have him!

Nothing, my dear George, can be more beautiful than the play of a vigorous salmon. The lubberly struggles of a pond fish are execrable to him who has felt the exquisite pleasure that attends the conquest of "the monarch of the stream." His bold rushes—his sudden and rapid attempts to liberate himself from the fisher's thrall—the energy with which he throws his silver body three or four feet above the surface of the water, and the unwearied and incessant opposition he makes until his strength is exhausted by the angler's science. All this must be experienced, to be adequately conceived. In ten minutes I mastered my beautiful victim; and Mortien Beg gaffed and landed a splendid summer fish, which, if the cook's scales be correct, weighed thirteen pounds and seven ounces.

* * *

Salmon laws.—The Scotch in early times had most severe prohibitions against the killing of the salmon. In the Regiam Majestatem are preserved several laws relating to their fisheries, couched in terms expressive of the simplicity of the times. From Saturday night until Monday morning they were obliged to leave a free passage for the fish, which is called the "Saterdaye's sloppe."

Alexander I. enacted "that the streame of the water sal be in all parts swa free, that ane swine of the age of three years, well feed, may turn himself within the stream round about, swa that his snowt nor taile sal not tuch the bank of the water." By a law of James IV. the third offence was made capital (before that, the offender had power to redeem his life). "Slayers of reide fish, or smoltes of salmond, the third time are punished with death; and sic like he quha commands the

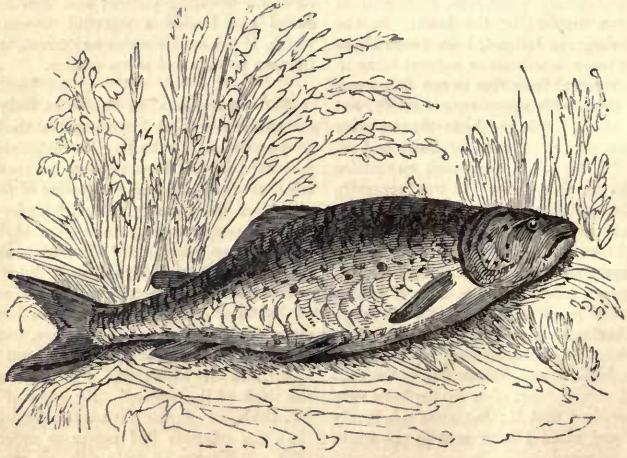
samine to be done." Salmon were in the reign of Henry VI. thought a present worthy of a crowned head, for in that reign, the Queen of Scotland sent to the Duchess of Clarence ten casks of salted salmon, which Henry directed to pass duty free.

Salmon Rod.—The salmon rod is, all but the top, made of ash, as being the lightest wood. The structure of the trout or fly rod has been variously recommended; the most ancient is, the butt to be made of yellow deal, seven feet long; next, a straight hazel, of about six feet; and then a delicate piece of fine-grained yew, exactly tapered, and ending in a point of whalebone, both making about two feet: to colour the stock, a feather dipped in aquafortis, and rubbed into the deal, gives it a cinnamon colour; for a nut-brown colour, a quartern of spirit lacquer, half an ounce of gamboge, the like quantities of gum sandarach and dragon's-blood (the three last to be powdered very fine), and as much of each of them as will lie upon a sixpence, put into the spirit lacquer, which must be kept stirring, until properly mixed: the phial must be warmed as well as the wood, and the mixture gradually laid on with a camel's-hair brush; after it is dried, a second and third coat is to be applied. To make the colour redder put double the quantity of dragon's-blood; to make the rod mottled, get green copperas and dissolve in spring water; dip linen tape in the liquid, and while wet twist it round about, and let it remain on the rod eight or ten hours in the cool; unbind the tape, which will be dry, and use the above-mentioned varnish, which will give the desired effect. The varnish also preserves the rings and the bindings that fix them to the rod. To fasten a fly rod of the above make properly, a piece of shoemaker's wax was rubbed upon each splice; a handle of a knife, or any hard thing, was rubbed over them, until they were smooth; they were then tied neatly together, and were as firm as any part of the rod.

* * *

The following comparison is made by Sir Humphry Davy, between trout and salmon:—The salmon is broader, has a tail rather more forked, and teeth in proportion are rather smaller. The trout, likewise, has larger and more black-brown spots on the body; and the head of the trout is a little larger in proportion. The salmon has fourteen spines in the pectoral fins, ten in each of the ventral, thirteen in the anal, twenty-one in the caudal, and fifteen in the dorsal. The salmon measures thirty-eight inches and a half in length, and twenty-one inches in girth; and his weight, as you see, is twenty-two pounds and a quarter. The trout has one spine less in the pectoral, and two less in the anal fin, and measures thirty inches and a quarter in length, and sixteen inches in girth, and his weight is eleven pounds. When opened, the stomach of the salmon contains nothing but a little yellow fluid, and, though the salmon is twice as large, does not exceed much in size that of the trout. The stomach of the trout, unlike that of the salmon, will be found full of food.—*Daniel—Wild Sports—Lloyd—Davy, &c.*

SALMON-TROUT, *s.* A trout that has some resemblance to a salmon.



The salmon trout is handsome in its form, is more richly adorned, and is longer, thicker, rounder in proportion than a salmon; the scales are small, beautifully intermixed

on both sides of the lateral line, and also the covers of the gills, with spots; the fins are strong, and the tail shorter, but not so much forked as the salmon's; the flesh is exceedingly rich, and in some countries better esteemed than any fish of the salmon kind; they are generally from two to six pounds weight, some run larger; they are often taken when angling for salmon or large trout, their haunts being the same. Early in the spring they enter the rivers, are in prime season from the end of April until July, and spawn chiefly in September; but that period varies in different waters; the rod should be as for salmon, the reel line strong, and foot length about three yards of fine twisted silkworm gut, or the strongest single, with the knots well whipped.—*Daniel.*

Salt, *s.* Salt is a body whose two essential properties seem to be solubility in water and a pungent sapor.

Salt, *a.* Having the taste of salt, as salt fish; impregnated with salt; abounding with salt.

Salt, *v.* To season with salt.

Saltcat, *s.* A contrivance to attach pigeons to their dovecot.

The last dietetic, or rather, perhaps, medicinal article necessary to be described, is the saltcat, so called from an old fancy of baking a real cat with spices for the use of pigeons, which, however, I never observed to eat animal food. In compliance with this custom, I caused to be placed in the middle of the pigeon loft a dish of the following composition:—Loam, sand, old mortar, fresh lime, bay-salt, cummin, coriander, caraway seed, and allspice, moistened into a consistence with urine. The pigeons were constantly pecking at this, and were in a constant state of good health; how much of which may be attributed to the use of the cat I cannot determine; but certainly they are extremely fond of it, and if it have no other merit, it prevents them from pecking the mortar from the roof of the house, to which otherwise they are much inclined. The cat was mixed and heaped up in the dish, a piece of board being placed upon the summit to prevent the birds from dunging upon it; when become too hard it was occasionally broken for them.

The regular old formula for this cat is as follows: gravel or drift-sand, unctuous loam, the rubbish of an old wall, or lime, a gallon of each—should lime be substituted for rubbish, a less quantity of the former will suffice—one pound of cummin-seed, one handful of bay-salt; mix with stale urine. Inclose this in jars, corked or stopped, holes being punched in the sides, to admit the beaks of the pigeons. These may be placed abroad.—*Moubray.*

Saltpetre, *s.* Nitrate of potash. The chief ingredient in the composition of gunpowder.

Saltwater, *s.* The water of the sea.

When on the sea, always use linseed oil for every part of your gun, except the works of the locks; because sweet oil has not body enough to repel the effect of the salt water. If the salt water should have stained your barrels, you will, I think, find yellow soap and warm water the best recipe to restore their colour.—*Hawker.*

Salve, *s.* A glutinous matter applied to wounds and hurts, a plaster.

Samlet, *s.* A little salmon; a par. *Vide* Par.

Sanable, *a.* Curable, susceptive of remedy.

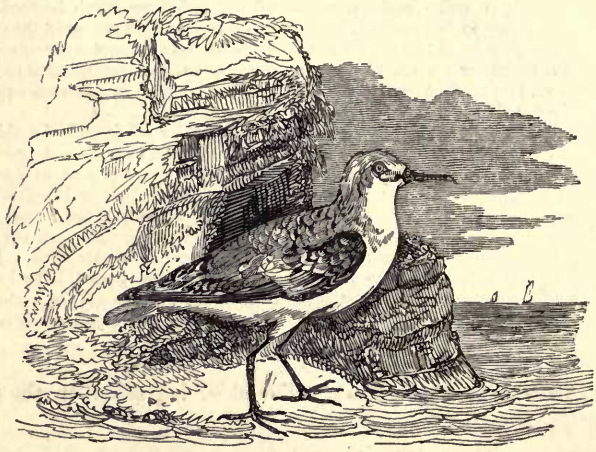
Sandblind, *a.* Having a defect in the eyes, by which small particles appear before them.

Sandcrack, *s.* A disease in the horse's hoof.

This is an accident that happens to dry brittle hoofs, and is in fact a breaking or fracture of the horn in the weakest part, that is, at the upper part of the inner quarter. A sandcrack almost always extends to the sensible parts, and can seldom be cured if the horse is kept in work. The first thing to be done is to open the crack with a drawing knife, for it generally runs obliquely under the horn, and cut out every hollow part completely, however far it may extend under the crust. Every particle of horn that is hollow or detached from the sensible parts must be completely cut away; some tar ointment

should then be applied, or at first a solution of blue vitriol. If there is much lameness or inflammation in the foot, it should be poulticed for several days or a week, and then the horse should be turned to grass without shoes, or with a bar shoe, for three weeks at least, or until an inch of new hoof appears above the crack. A little blister ointment just above the crack often does good, and tar ointment on the crack and adjacent horn. Observe, too, that the quarter where the crack is must be rasped away as thin as possible. In this way sandcracks may be always cured without difficulty. The brittle state of the hoof, however, must be corrected when the horse returns from grass, by paring the soles rather thin, applying a wide hollow shoe, and keeping the foot stopped, not with cow-dung or clay, as has been advised, but with the tar ointment; this will be absorbed through the horn, stimulate the secreting vessels, and cause a plentiful effusion of that odorous vapour which is constantly escaping from the bottom of the foot. The vessels being thus unloaded, the temperature of the foot will be reduced, and the secretion of horn will be at the same time so increased, that the horse will soon be able to go with a narrower shoe. —*White.*

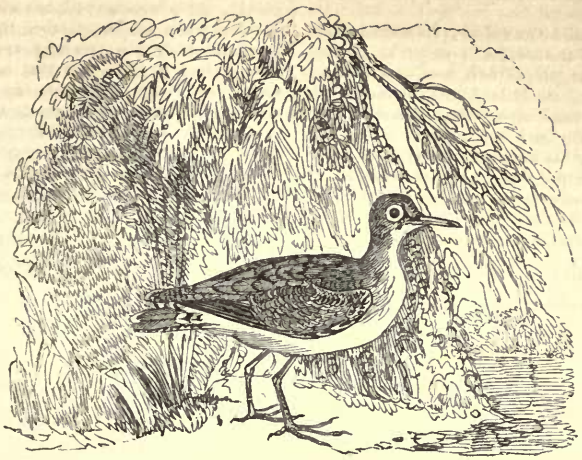
SANDERLING, TORVILLEE, or CURWILLET (*Charadrius Calidris*, LINN.; *Maubeche*, BUFF.) *s.* A bird.



This bird weighs almost two ounces, is about eight inches in length, and fifteen in breadth from tip to tip. The bill is an inch long, slender, black, and grooved on the sides nearly from the tip to the nostril; the brow, to the eyes, white; the rest of the head, pale ash-colour, mottled in brown streaks from the forehead to the hinder part of the neck, and on each side of the upper part of the breast; back scapulars and greater coverts brownish ash, edged with dull white, and irregularly marked with dark brown spots. The pinions, lesser coverts, and bastard wings, dark brown; the quills, which extend beyond the tail, are of the same colour on the exterior webs and points, except four of the middle ones, which are white on the outer webs, forming, when the wing is closed, a sharp wedge-shaped spot; the inner webs brownish ash; the secondary quills brown, tipped with white; the rump and tail coverts are also brown, edged with dirty white; the tail feathers brownish ash edged with a lighter colour—the two middle ones much darker than the rest; the throat, fore part of the neck, breast, belly, thighs, and vent, are white; the toes and legs black, and bare a little above the knees. This bird is of a slender form, and the plumage has a hoary appearance among the stints, with which it associates on the sea shore in various parts of Great Britain. It wants the hinder toe, and has, in other respects, the look of the plover and dotterell, to which family it belongs.

Latham says, this bird, like the purre, and some others, varies considerably, either from age or the season; for those he received in August had the upper parts dark ash-coloured, and the feathers deeply edged with ferruginous colour; but others sent to him in January were of a plain dove-coloured grey. They differ also in some other trifling particulars.

SANDPIPER, *s.* A bird.



The tongue of the sandpiper is slender; toes divided, or very slightly connected at the base by a membrane; hinder toe weak; their bills are nearly of the same form as those of the preceding species, but shorter: their haunts and manner of life are also very similar. Latham has enumerated thirty-seven species and nine varieties of this genus, seventeen of which are British, exclusive of those which, in this work, are placed among the plovers; but the history and classifications of this genus are involved in much uncertainty.

Common Sandpiper. (*Tringa hypoleucus*, LINN.; *La Guignette*, BUFF.)—This bird weighs about two ounces, and measures seven inches and a half in length. The bill is about an inch long, black at the tip, fading into pale-brown towards the base. The head, and hinder part of the neck, are brownish-ash, streaked downwards with dark narrow lines: the throat is white, and a streak of the same colour surrounds and is extended over each eye; the cheeks and auriculars are streaked with brown; the forepart of the neck, to the breast, is white, mottled and streaked with spots and lines of a brown colour, pointing downwards; in some the breast is plain white; belly and vent white. The ground-colour of all the upper parts of the plumage is ash, blended with glossy olive bronze; the coverts, scapulars, lower part of the back, and tail-coverts, are edged with dull white, and most elegantly marked with transverse dark-coloured narrow, waved lines; the first two quills are plain brown; the next nine are marked on the middle of their inner webs, with white spots; the secondaries are also marked in the same manner, on both webs, and tipped with white. The tail consists of twelve feathers; the four middle ones are of an olive brown, dark at the tips; those next to them, on each side, are much lighter coloured, mottled with dark-brown and tipped with white; the two outside ones are edged and tipped in the same manner, but are barred on their webs with dark-brown; legs pale dull-green, faintly blushed with red.

This elegant little bird breeds in this country, but the species is not numerous; yet they are frequently seen in pairs during the summer months; and are well known by their clear piping note, by their flight, by jerking up their tails, and by their manner of running after their insect prey on the pebbly margins of brooks and rivers. The female makes her nest in a hole on the ground near their haunts; her eggs, commonly five in number, are much mottled and marked with dark spots, on a yellowish ground. They leave England in the autumn; but whither they go is not particularly noticed by ornithologists. Buffon says they retire far north; and Pennant and Latham, that they are met with in Siberia and Kamtschatka, and are also not uncommon in North America.

Brown Sandpiper. (*Fusca.*)—Pennant describes this bird, which, he says, was bought in a London market, and preserved in the collection of the late M. Tunstall, Esq., of Wycliffe:—Size of a jacksnipe; the bill is black; the head, upper part of the neck, and back, are of a pale-brown, spotted with black;

coverts of the wings dusky, edged with dirty white; under side of the neck white, streaked with black; tbe belly white; tail cinereous: legs black.

Greenwich Sandpiper. (*Greenovicensis.*)—Size of the redshank; weight nearly eight ounces; length twelve inches and a half; bill an inch and a half long, black; crown of the head reddish-brown, streaked with black; nape, cheeks, and neck, ash-colour; the middle of the feathers dusky, down the shaft; lower part of the neck and back, black; the feathers margined on the sides with pale ferruginous, and some of those of the back at the tips also; chin nearly white; forepart of the neck very pale ash-colour, as far as the breast, which is a dusky white; belly, sides, vent, and upper tail-coverts on each side, and the whole of the under ones, white; lesser wing-coverts ash-colour; the greater, the same, obscurely margined with pale ferruginous; greatest tipped with white; under wing coverts pure white; prime quills dusky, the shafts more or less white; secondaries and scapulars nearly the colour of the back; the secondaries and primaries very little differing in length; the lower part of the back, rump, and middle of the tail-coverts, ash-colour; tail a little rounded at the end, brownish ash-colour, somewhat mottled with brownish near the tips, and fringed near to the end with pale ferruginous; legs dusky olive-green, bare an inch above the knee; the outer and middle toe connected at the base.

Black Sandpiper. (*Tringa cinerea.*)—Size of a thrush; the beak short, blunt at the point, and dusky; nostrils black; the irides yellow: the head small, and flattened at the top; the colour white, most elegantly spotted with grey; the neck, shoulders, and back, mottled in the same manner, but darker, being tinged with brown; in some lights these parts appeared of a perfect black, and glossy; the wings were long; the quill feathers black, crossed near the base with a white line; the throat, breast, and belly white, with faint brown and black spots of a longish form, irregularly disposed, but on the belly become larger and more round; the tail short, entirely white, except the two middle feathers, which are black; legs long and slender, and of a reddish brown colour.

Spotted Sandpiper. (*Tringa macularia*, Linn.; *La Grive d'Eau*, Buff.)—This bird measures about eight inches in length; the bill is black at the tip, and fades into a reddish colour towards the base; a white streak is extended over each eye, and a brownish patch between them and the bill; the whole upper part of the plumage is of a glossy lightish brown, with green reflections; the head and neck are marked with longish small dark spots; on the back, scapulars, and wing coverts, the spots are larger, and of a triangular shape; the rump is plain; the greater quills are dusky; secondaries tipped with white, as are also the greater and lesser coverts, which form two white oblique lines across the extended wings; the two middle feathers of the tail are greenish brown; the sides ones white, crossed with dusky lines; the breast, belly, and vent, are white, but in the female spotted with brown; legs of a dirty flesh colour. This species is not common in England.

Red-legged Sandpiper. (*Tringa erythropus.*)—This bird measures from the tip of the beak to the end of the tail ten inches; the bill is an inch and three-eighths long, black at the tip, and reddish towards the base; the crown of the head is spotted with dark brown, disposed in streaks, and edged with pale brown and grey; a darkish patch covers the space between the corners of the mouth and eyes; the chin is white; the brow and cheeks pale brown, prettily freckled with small dark spots; the hinder part of the neck is composed of a mixture of pale brown, grey, and ash, with a few distinct dusky spots; the forepart and breast are white, clouded with a dull cinnamon colour, and sparingly and irregularly marked with black spots, reflecting a purple gloss; the shoulder and scapular feathers are black, edged with pale rust colour, and have the same glossy reflections as those on the breast; the tertials are nearly the same length as the quills; the ridges of the wings are a brownish ash colour; the coverts, back, and rump, are nearly the same, but inclining to olive, and the middle of each feather is of a deeper dusky brown; the primary quills are deep olive brown; the exterior webs of the secondaries are also of that colour, but lighter, edged and tipped with white, and the inner webs are mostly white towards the base; the tail coverts are glossy black, edged with pale rust colour, and tipped with white, but in some of them a streak of white passes from the middle upwards nearly the whole length. The tail feathers are lightish brown, except the two middle ones, which are barred with spots of a darker hue; the belly and vent are white; legs bare above the knees, and red as sealing-wax; claws black. The female is less than the male, and her plumage more dingy and indistinct; an egg taken out of her previous to stuffing was surprisingly large considering her bulk, being about the size of that of a magpie, of a greenish white colour, spotted and blotched with brown, of a long shape, and pointed at the smaller end. This bird is a constant inhabitant of the fens, and is known to sportsmen by its singular notes, which are very loud and melodious, and are heard even when the bird is beyond the reach of sight.

The description of this bird, which, it seems,

is common in the fen countries, has been more particularly attended to, because it has not been described in any of the popular works on ornithology; at least not so accurately as to enable a naturalist to distinguish it by the proper name.

Red Sandpiper, Aberdeen Sandpiper. (*Tringa Icelandica*, LINN.)—Latham describes this bird in the following manner:—Length from eight to ten inches; bill brown, one inch and a half long, and a little bent downwards; head, hinder part of the neck, and beginning of the back, dusky, marked with red; forepart of the neck and breast cinereous, and mixed with rust colour, and obscurely spotted with black; lesser wing coverts cinereous; quills dusky; secondaries tipped with white; the two middle tail feathers dusky; the other cinereous; legs long and black.

Ash-coloured Sandpiper. (*Tringa Cinerea*, LINN.)—This bird weighs between four and five ounces, and measures ten inches in length, and about nineteen in breadth, The whole upper parts of the plumage are of a brownish ash-colour: the head is spotted, and the neck streaked with dusky lines: the feathers of the back, scapulars, and wing coverts, are elegantly marked or bordered on their ridges and tips, with two narrow lines of dull white, and dark brown. Some specimens have black spots on the breast, but most commonly the whole under parts are pure white; the tail is cinereous, edged with white, and its coverts are barred with black; legs dirty green; toes edged with a fine narrow scalloped membrane.

The ash-coloured sandpiper, it is said, breeds in the northern parts of both Europe and America. Pennant says they appear in vast flocks on the shores of Flintshire in the winter season; and Latham, that they are seen in vast numbers on the Seal Islands, near Chateau Bay; and also that they breed and remain the whole summer at Hudson's Bay, where they are called by the natives sasqua pisqua nishish.

Shore Sandpiper. (*Tringa Littorea*, LINN.; *Le Chevalier Variée*, BUFF.)—Under this name Latham describes this bird, which it is said migrates from Sweden into England at the approach of winter. He makes it a variety of the last species, and says it does not differ materially from it. "The spots on the back are ferruginous instead of white: the shaft of the first quill is white, as in the green sandpiper; and the secondaries have white tips: the legs are brown." Brunnich mentions a further variety, wherein the first quill has a black shaft, and the spots on the back and wings are less; and observes, that they differ in age and sex.

Green Sandpiper. (*Tringa Ochropus*, LINN.; *Le Becasseau, ou Cul-blanc*, BUFF.)—This bird measures about ten inches in length, to the end of the toes nearly twelve, and weighs about three ounces and a half: the bill is black, and an inch and a half long: a pale streak extends from it over each eye; between which and the corners of the mouth; there is a dusky patch. The crown of the head and hinder part of the neck are of a dingy brownish ash-colour, in some specimens narrowly streaked with white; the throat white; fore part of the neck mottled or streaked with brown spots, on a white or pale ash-coloured ground. The whole upper parts of the plumage are of a glossy bronze, or olive brown, elegantly marked on the edge of each feather with small roundish white spots; the quills are without spots, and are of a darker brown; the secondaries and tertials are very long; the inside of the wings are dusky, edged with white grey; and the inside coverts next the body are curiously barred, from the shaft of each feather to their edges, with narrow white lines, formed nearly of the shape of two sides of a triangle. The belly, vent, tail coverts, and tail, are white; the last broadly barred with black, the middle feathers having four bars, and those next to them decreasing in the number of bars towards the outside feathers, which are quite plain: the legs are green.

This bird is not any where numerous, and is of a solitary disposition, seldom more than a pair being seen together, and that chiefly in the breeding season. It is a scarce bird in England, but is said to be more common in the northern parts of the globe as far as Iceland. It is reported that they never frequent the sea shores, but their places of abode are commonly on the margins of the lakes in the interior and mountainous parts of the country.—*Bewick*—*Latham.*

SANGUINE, *a.* Red, having the colour of blood; abounding with blood more than any other humour.

SAP, *s.* The vital juice of plants, the juice that circulates in trees and herbs.

SARCELLE, (*Clangula Glacialis*, FLEM.) *s.* A bird of the duck tribe.

This species is about the size of a widgeon, length twenty-two inches, including the long feathers of the tail; the bill is black; down the middle and across the tip, orange; irides red; the fore part and sides of the head are reddish grey; on each side of the neck, just below the head, is an oval black spot; the hind part of the head, the throat, and remaining part of the neck and breast, white; back and rump black; sides of the upper tail coverts white, the middle black; the lower belly and vent white; the scapulars white

long, and pointed; the wings chiefly black, with a mixture of chestnut; the four middle tail feathers are black, the others white; the two middle ones are narrow, and exceed the others three inches and a half; legs of a dull red; claws black.

Such is the description of the male; but in some the black spots are more or less of a chocolate colour, and the spot on the neck occupies half of it. The length of the tail also varies.

The female has been described by some authors for a different species. The bill, however, which is the same in this sex, seems to be an unerring guide. The sides of the head are white, behind cinereous; the rest of the head, the neck, breast, and back, dusky black; the lower part of the breast and scapulars chestnut; belly white; upper tail coverts and wings like the male; legs dusky reddish brown. This sex is also subject to some variation; most commonly, the middle tail-feathers are not much longer than the rest. It is seldom met with in England, but is frequent in the north of Scotland and the Orkneys in winter, where they assemble in large flocks; it is common in Sweden, Lapland, and Russia, and is said to breed in Greenland and at Hudson's Bay, where it makes a nest of grass near the sea, and lays ten or more bluish-white eggs. The down of this bird is said to be as valuable as that of the eider duck.—*Montagu.*

Savage, *a.* Wild, uncultivated; uncivilised, barbarous.

Savin, *s.* A plant formerly used in veterinary and canine diseases.

Scab, *s.* An incrustation formed over a sore by dried matter; the itch or mange of horses.

Scabbed, *a.* Covered or diseased with scabs; paltry, sorry.

Scad, *s.* A kind of fish, probably the same as shad.

Scale, *s.* A balance, a vessel suspended by a beam against another; the small shells or crusts which, lying one over another, make the coats of fishes; anything exfoliated; a thin lamina; regular gradation; anything marked at equal distances.

Scale, *v.* To climb as by ladders; to measure or compare; to take off a thin lamina; to pare off a surface; to clean fishes.

Scaled, *a.* Squamous, having scales like fishes.

Scallop, *s.* A fish with a hollow pectinated shell.

Scalp, *v.* To deprive the skull of its integuments.

Scaly, *a.* Covered with scales.

Scapula, *s.* The shoulder blade.

Scapulars, *s.* *In ornithology*, are feathers which take their rise from the shoulders, and cover the sides of the back.

Scar, *s.* A mark made by hurt or fire, a cicatrix.

Scar, *v.* To mark as with a sore or wound.

Scarfskin, *s.* The cuticle; the epidermis.

Scarification, *s.* Incision of the skin with a lancet, or such like instrument.

Scarlet, *a.* Of the colour of scarlet.

Scate, *s.* A kind of wooden shoe on which people slide; a fish of the species of thornback. Scates are exceedingly abundant on the Irish coasts: they are a coarse fish, and little valued.

Scate, *v.* To slide on scates.

Scating, *a.* The art of sliding.

Scaup Duck, or Spoonbill Duck (*Nyroca marila*, Flem.), *s.*

The length of this species is about twenty-one inches; weight sometimes as much as thirty-five ounces; the bill is broad, and not so much compressed as usual in this genus; colour bluish-lead; nail black; irides light gold-colour; the head and upper part of the neck black, glossed with green, and, from being well clothed with feathers, appears large; the lower part of the neck and breast black; back and scapulars pale grey, undulated with innumerable small transverse lines of black; the wing coverts the same, but minutely small; lower part of the back, rump, and vent, black; the primores are dusky, lightest on their inner webs, and black at the ends; the secondary quills, except a few next the body, are white tipped with black, forming a broad bar of white across the wing; the under part of the body is white, sprinkled between the thighs with dusky; the tail is composed of dusky-black feathers; legs lead-colour. In some we have seen, the white in the wing is edged with rust-colour: it is also subject to other varieties.

The scaup duck is not uncommon in most parts of this kingdom in winter, and is frequently found in fresh waters. It is supposed to take its name from feeding on broken shells called scaup. This, like most of the genus, breeds in the more northern parts; is common in Russia, Sweden, Norway, and Lapland; and is found at Hudson's Bay, in the warmer months.—*Montagu.*

Scent, *s.* The power of smelling; the smell; the object of smell; chace followed by the smell.

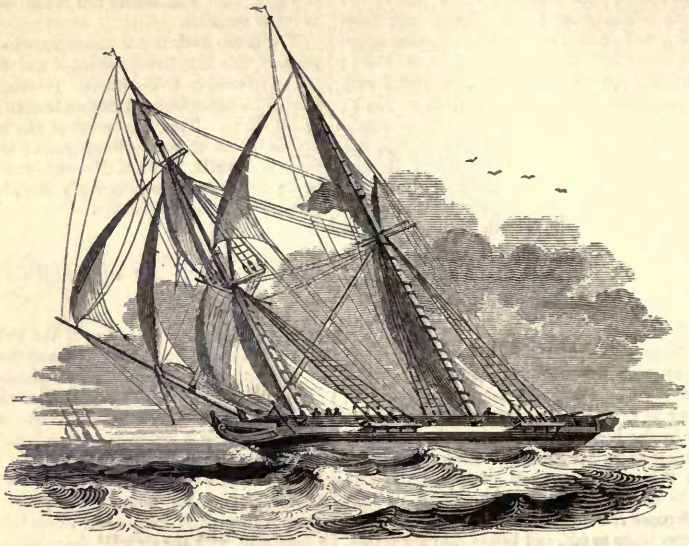
Scent cannot be ascertained by the air only, it depends also on the soil. Doubtless, the scent most favourable to the hound, is when the effluvia constantly perspiring from the game as it runs, is kept by the gravity of the air to the height of his breast; for then it is neither above his reach, nor need he stoop for it: this is what is meant when scent is said to be breast high. Experience tells us that difference of soil alters the scent. When the leaves begin to fall, and before they are rotted, scent lies ill in cover—a sufficient proof that it does not depend on the air only. Scent also varies by difference of motion; the faster the animal goes the less scent it leaves. When game has been ridden after, and hurried on by imprudent sportsmen, hounds will with difficulty pick out the scent; and one reason may be, that the particles of scent are then more dissipated: but if the game should have been run by a dog not belonging to the pack, very seldom will any scent remain.

Scent frequently alters in the same day; and without asserting what scent exactly is, it may be said to depend chiefly on two things—the condition of the ground, and the temperature of the air, which should be moist without being wet. When both are in this state, the scent is then perfect; and *vice versa*, when the ground is hard and the air dry, there seldom will be any scent. It scarce ever lies with a north or an east wind; a southerly wind without rain, and a westerly one that is not rough, are the best. Storms in the air seldom fail to destroy scent. A fine sunshiny day is not good for hunting; but a day warm without sun, is generally a perfect one: there are not many such in a whole season. In some fogs scent lies high, in others not at all, depending, probably, on the quarter the wind is then in. It sometimes lies very high in a mist, when not too wet; but if the wet continues to hang upon the boughs and bushes, it will fall upon the scent and deaden it. When the dogs roll, and also when cobwebs hang on the bushes, there is seldom much scent. During a white frost, the scent lies high, as it also does when the frost is quite gone; at the time of its going off (which is a critical minute for hounds, in which their game is frequently lost), scent never lies. In a hard rain, with the air mild, scent will sometimes be very good. A wet night often produces the best chases, game not then liking to run the cover or the roads. In heathy countries, where the game brushes as it goes along, scent seldom fails; yet, from the inclosures of poor land surrounding them, the scent is, at times, very difficult for hounds; the sudden change from a good to a bad scent confuses their noses; a scent therefore which is less good, but less unequal, is more favourable to hounds. When the ground carries the scent is bad for an obvious reason, which hare-hunters who pursue their game over greasy fallows and dirty roads have great cause to complain of. A remark has been generally made, that scent lies best in the richest soils, and those countries which are favourable to horses are not so to hounds; and it has likewise been observed in some particular spots in almost every country, let the temperature of the air be as it may, that hounds can never carry a scent across them.

The morning is the part of the day which usually affords the best scent, and the animal itself, which you are at this time more than ever desirous of killing, is then least able to escape; the want of rest, added perhaps to a full belly, give hounds a decided superiority over an early found fox.—*Daniel.*

Scent, *v.* To smell, to perceive by the nose; to perfume, or to imbue with odour good or bad.

Schooner, *s.* A vessel with two masts.



Schooners, within the last twenty years, have gradually come into general use, and have, in a great degree, superseded the smaller sized brigs and large sloops which were formerly employed as coasters. They are found more manageable and weatherly, and in sailing qualities infinitely superior to either.

The Americans are celebrated for the size of their schooners, and the beauty of their mould. In the late war, numbers of these vessels were fitted out as privateers; and from their extraordinary sailing properties, their success was unexampled.

In the Royal Yacht Club there are a good number of vessels of this class; but the cutter rig appears to be the favourite.

The common tonnage of schooners ranges from 80 to 150; but some of the Baltimore privateers admeasured 300 tons.

Scirrhus, *s.* An indurated gland.

Scirrhous, *a.* Having a gland indurated.

Scissors, *s.* A small pair of shears, or blades moveable on a pivot, and intercepting the thing to be cut. Scissors with very fine points are indispensable to fly-tiers.

Scollop, *s.* A pectinated shell fish.

Scolopax, (Illiger,) *s.* The snipe, a genus thus characterised:—

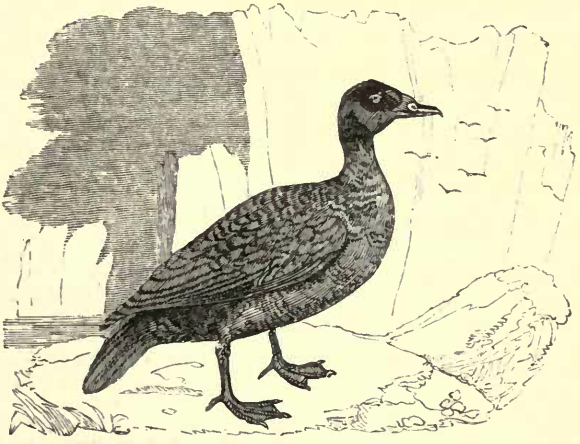
Bill long, straight, compressed, slender, soft, bulged at the point; the two mandibles furrowed about the half of their length; the point of the upper mandible longer than the under, the bulged part forming a hook; ridge elevated at its base and salient; nostril, at the sides of the base, slit lengthwise, near the edges of the mandible, covered by a membrane; legs of mean length, slender, the naked space above the knee very small; three toes before

entirely divided, the middle and the outer ones rarely united; one toe behind; wings of mean length, the first quill of equal length, or a little shorter than the second, which is the longest in the wing.

This division of the numerous scolopax genus of Linnæus amounts, according to Latham, to about twenty species, besides varieties, of which only the woodcock, common snipe, and judcock, and their varieties, are accounted British birds.

Pennant has placed the woodcock after the curlews, as the head of the godwits and snipes; and others are of opinion that the knot, from the similarity of its figure to that of the woodcock, ought to be classed in this tribe. In the subdivisions, ornithologists may vary their classification without end. As in a chain doubly suspended, the rings of which gradually diminish towards the middle, the leading features of some particular bird may point it out as a head to a tribe; others, from similarity of shape, plumage, or habits, will form, by almost imperceptible variations, the connecting links; and those which may be said to compose the curvature of the bottom, by gradations equally minute, will rise to the last ring of the other end, which, as the head of another tribe, will be marked with characters very different from the first.—*Montagu.*

SCOTER, BLACK DUCK, or BLACK DIVER, (*Anas Nigra*, LINN.; *La Macreuse*, BUFF.) *s.* A kind of duck.



The scoter is less than the velvet duck, weighing generally about two pounds nine ounces, and measuring twenty-two inches in length, and thirty-four in breadth.

In severe winter the scoters leave the northern extremities of the world in immense flocks, dispersing themselves southward along the shores of more temperate climates. They are only sparingly scattered on the coasts of England.

The scoters seldom quit the sea, upon which they are very nimble, and are indefatigable expert divers; but they fly heavily, near the surface of the water, and to no great distance, and are said to walk awkwardly erect on the land.—*Bewick.*

SCRAY, *s.* A bird called the sea-swallow.

SCREECH, *v.* To cry out as in terror or anguish; to cry as a night owl.

SCREECHOWL, *s.* An owl that hoots in the night.

SCREEN, *s.* Anything that affords shelter or concealment; a riddle to sift sand. An artificial erection to cover the shooter's approach when stealing upon wildfowl.

Screw, *s.* One of the mechanical powers; a kind of twisted pin or nail which enters by turning; bolts which secure a gun-lock.

Screw, *v.* To turn by a screw; to fasten with a screw; to deform by contortions.

Screwdriver, *s.* An implement to turn screws.

Scruple, *s.* Doubt; perplexity; twenty grains, the third part of a drachm.

Sculk, *v.* To lurk in hidingplaces, to lie close.

Scull, *s.* The bone which incases and defends the brain; the arched bone of the head; a small boat; one who singly rows a boat; a shoal of fish.

Sculler, *s.* A boat in which there is but one rower; one that rows a boat, singly.

Scurf, *s.* A kind of dry miliary scab; soil or stain adherent; anything sticking on the surface.

Scut, *s.* The tail of those animals whose tails are very short, as the hare, rabbit, &c.

Sea, *s.* The ocean, the water opposed to the land; a collection of water.

Sea-fishing, *s.* The pursuit of sea-fish.

This water-sport is unknown 'to the many,' and yet to him whose hands are not unacquainted with rope and oar, it affords, at times, an admirable amusement.

The coal-fishing requires a stiff breeze, and if there be a dark sky it is all the better. In its detail it is perfectly similar to mackerel-fishing, only that the superior size of the coal-fish makes stronger tackle and a heavier lead indispensable.

An eel of seven or eight inches long is the bait. The head being removed, the hook is introduced as in a minnow, and the skin brought three or four inches up the snoud. This latter is a fine line of two or three fathoms length, affixed to the trap-stick and lead, the weight of which latter is regulated by the rate of sailing.

The coal-fish, in weight, varies from two to fourteen pounds; it is finely shaped, immensely rapid, uniting the action of the salmon with the voracity of the pike. If he miss his first dash, he will follow the bait to the stern of the boat, and I have often hooked them within a fathom of the rudder.

Four or five knots an hour, is the best rate of sailing for killing coal-fish, and upon a coast where they are abundant, the sport, at times, is excellent.

Like the pike the coal-fish is very indifferent to the tackle used, which is generally very coarse. Not so the mackerel; he requires much delicacy of line and bait to induce him to take.

In light winds, or when the fish are out of humour, I have killed mackerel by substituting a salmon casting line of single gut, for the hempen snoud commonly employed by fishermen, which with a newly-cut bait of phosporic brilliancy, commonly overcame his resolve against temptation. But there are times when a change of weather, or some inexplicable phenomena of sea or sky, render these fish dull and cautious—for usually it requires but trifling art to kill them.

A little experience is necessary. The bait must be cut from the freshest mackerel, and assimilated in size and shape to the herring-fry, which they generally follow—and the way of the boat must be so regulated, as to preserve the deception by a sufficient velocity, without breaking by its rapidity the mackerel's hold. The mouth of this fish is particularly tender—and if care be not taken many will drop from the hook before they can be secured on board.—*Wild Sports.*

Seafowl, *s.* A bird that lives at sea.

Shooting Seafowl.—To venture after fowl at sea you must have a large boat with good bearings, that will carry plenty of canvass. Rowing after them scarcely ever answers; but when it blows fresh a fast sailing boat may often run in upon geese, and sometimes other birds, before they can take wing; and after a coast has been for some time harassed by the gunning punts, I have seen more birds killed under sail from a common boat, than by any other manner of day shooting. But, to do the business well, a stanchion gun must be fixed

in the boat, and this, by all means, contrived so as to go back with the recoil, or you run the risk of staving your boat, and therefore of being really in danger. Recollect when you get on the outside of the harbour an accident is no joke; and you have, as Dr. Johnson observes, but one plank between you and eternity.

A boat for this work should have plenty of bearings, and have as little keel as she can well go to windward with, in order to get, at times, within shot of the mud and sands, and also to run through a harbour at spring tides without getting aground. You should therefore, for this sport, always make choice of a day when the wind is off the land, and a time when the tide is flowing; as you have then no danger of filling your boat with the hollow sea of a lee shore, or running her so fast aground as not to be able to get her off immediately. In following wild fowl under sail, command, as much as you can, a windward berth, in order to bear down on them at pleasure; and if they rise out of shot against wind, as they usually do, luff up directly, and try to head them for a cross shot. As the gun, when on one tack, is in the way of the jib, you must have the man who attends the jib-sheets always in readiness to haul the weather one to windward; but this must be done only just before you want to fire, or you deaden the boat's way. Take care also to let the sheet be under the barrel of the gun, in order that your line of aim may be clear of every thing. In this pursuit, when the more wind sometimes the more sport, never go with less than three good hands; and be careful in squally weather not to make too fast the mainsheet, as nine-tenths of the misfortunes that we hear of, have occurred from this very circumstance.—*Hawker.*

SEAGREEN, *a.* Resembling the colour of the distant sea, cerulean.

SEAGULL, *s.* A sea bird. *Vide* GULL.

SEAHOG, *s.* The porpoise.

SEAMEW, *s.* A fowl that frequents the sea; one of the gull tribe.

SEAL, *s.* A stamp engraved with a particular impression, which is fixed upon wax; the seacalf, or phoca.

Seals are very numerous on the coast, and at this season a number may be seen any warm day you make an excursion up the Sound of Achil. We shoot them occasionally; the skin makes a waterproof covering, and the fat affords an excellent oil for many domestic purposes. It is difficult, however, to secure the animal, for numbers are shot and few gotten. The head is the only place to strike them, for even when mortally wounded in the body, they generally manage to escape. This fact we have ascertained, from finding them dead on shore many days after they were wounded, and at a considerable distance from the place where they had received the bullet. I shot one last autumn at the mouth of the river, and a fortnight afterwards he was taken up in the neighbourhood of Dhu-hill. There could be no doubt as to the identity of the creature, for on opening him to extract the oil, a rifle-ball, such as I use, of the unusually small size of fifty-four to the pound, was found lodged in his lungs. Unless when killed outright, they sink instantly; and I have seen the sea dyed with blood to an extent that proved how severely the seal had been wounded, but never could trace him farther.

Formerly, when seal-oil and skins were of value, some persons on the coast made the pursuit of the animal a profession. There is one of these persons living near the Sound, a miserable, dwarfish, red-bearded wretch, whom you would consider hardly equal to grapple with a salmon, and yet he secures more seals than any hunter in the district. His method of effecting it is singular; he uses neither gun nor spear, but kills the animal with a short bludgeon, loaded at the end with lead.

Adjacent to the seal-killer's residence there is a large rock, uncovered at half-tide, and this appears the most favourite haunt for the animal to bask upon. The rock is easily approached from the main land, and on a sunny day, when the wind favours the attempt, the hunter, undressed, and armed with his bludgeon, silently winds among the stones, and steals upon his sleeping prey. Wary as the creature is, the Red Dwarf seldom fails in surprising him, and with astonishing expertness generally despatches him with a single blow.—*Wild Sports.*

SEAR, *v.* To burn, to cauterise.

SECONDARY, *s.* *In ornithology,* the second feather in the wing.

SEDGE, *s.* A growth of narrow flags, a narrow flag.

SEDGY, *a.* Overgrown with narrow flags.

SEER, *s.* A gunlock spring.

SEINE, *s.* A net used in sea-fishing.

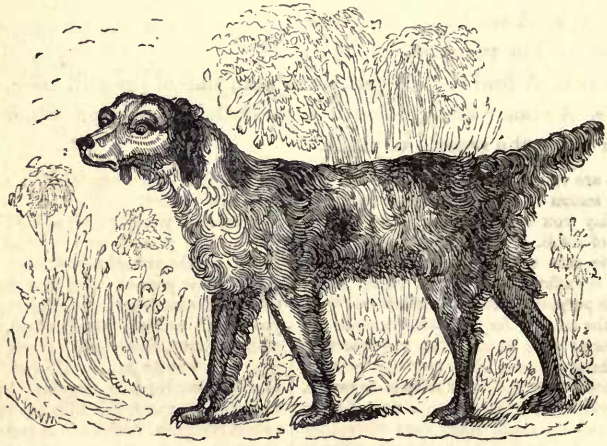
SERPENTINE, *a.* Resembling a serpent; winding like a serpent.

SERRATED, *a.* Formed with jags or indentures, like the edge of a saw.

SETON, *s.* A seton is made when the skin is taken up with a needle, and the wound kept open by a twist of silk or hair, that humours may vent themselves. Farriers call this operation in cattle, *rowelling*.

Setons consist of tape, threads, or lamp cotton passed under the skin, and smeared with digestive ointment. The instrument employed for conveying these under the skin is named a seton needle, and may be purchased at the instrument makers. When lamp cotton is used, it can be withdrawn gradually, thread by thread, which on some occasions is desirable. Setons are preferable to rowels, being more convenient and equally efficacious.—*White.*

SETTER, *s.* One who sets; a dog who beats the field, and points the bird for the sportsmen.



The Old English Setter. (*Canis Index, variety α.*)—This breed was originally produced between the Spanish pointer and the large water spaniel, and was famous on account of his steadiness and exquisite sense of smelling; the hair over the whole body was much more curled than that of the present breed, which has been considerably lightened by the additional cross of the springer; he was also much more steady than the improved variety, but then he had not the same speed to recommend him. Fine dogs of this kind were also produced by a cross with the stag and blood hounds. They united great strength, considerable swiftness, and were used for the chace in some few instances.

The English Setter (*Canis Index, variety β*), is a breed produced between the Spanish pointer, the English water spaniel and springer, which, by careful cultivation, has attained a high degree of perfection as a sporting dog. He has an elegant figure, and a very pleasing diversity of colour; added to this, his skin is covered with beautifully curled hair, very villous on the lower margin of the tail; being altogether an extremely handsome dog, and quite unrivalled by any of the canine species.

The setter has all the excellent qualities of the pointer, with a greater degree of speed and natural vivacity of temper; he, however, is not so easily broken in as the pointer, and requires a certain degree of training every year, to make him continue staunch. There

are, however, various instances of setters being self-taught, as the following example will show:—The black and tan small setter bitch which I have (says Mr. Torry), was originally out of the Duke of Bedford's breed, and both she and her mother inherit the utmost natural sagacity as sporting dogs. At ten months old, and before she had got a lesson in breaking, or had seen game killed, she was taken to the moors for the first time, and on finding a bird, was perfectly steady at her point, backed, and did not run the game. The gentleman who was with me wounded a bird, and it fell at a considerable distance. The pup, unknown to us, had kept her eye upon it, and, to our astonishment, after we had loaded, and again ordered our dogs to range, she went direct to the spot where the bird fell, found and fetched it to my friend's feet. This happened in August, 1825.

The setter ranges with great speed, and is a very hardy dog. Many prefer him to the pointer, and if water is plentiful, he is certainly more useful, for his feet are much better defended against the sharp cutting of the heath than those of the pointer, as he has a great deal of hair growing between the toes and round the ball of the foot, of which the latter is almost destitute. Besides, he unquestionably ranges much faster, and can endure much more fatigue. He can also serve in thick coverts, where a pointer will not enter; and, on this account, is useful in woodcock shooting, where springers or cockers are not kept.

Formerly the setter was used for the purpose of taking partridges with a draw-net, and was generally taught to squat down when the game was within a proper distance—hence the name setter. They are now, however, trained to point in the same manner as the spaniel. It is said that Robert Dudley, Duke of Northumberland, was the first person who broke a setter to the net.

* * *

There is not a country in Europe that can boast of finer setters than Ireland; they are there called English spaniels, and differ widely from the setters of England and Scotland. They are not esteemed in Ireland unless their colour be either a deep chestnut and white, or all red; a black and white setter, or any colour but red, or red and white, would not be looked upon or reputed well bred, allowing them to be ever so good. It matters not whether they are all red, or red and white; but those esteemed most have a black nose, and a black roof to their mouth,—as most sportsmen conceive the black nose to be finer and superior to any other. Sir William Barker, Mr. Oliver of Castle Oliver, Mr. Macarthy of Spring House, and many other gentlemen in Ireland, have the most beautiful and steady of this kind. A circumstance occurred, with respect to the steadiness and discipline of some of this breed, which the compiler was an eye-witness to:—Colonel Macdonald being on a visit at Mr. Oliver's, during the grousing season, and going out one day, took out with him five brace of setters; on getting to the mountains, one of the dogs found some birds, all the rest backed in at once, upon which Colonel Macdonald called to the last dog to take the lead, and in that manner he drew the dogs alternately, until the last became first, and fixed the birds, which had run nearly a mile. These dogs in general fetch a long price; Mr. Macarthy got two hundred guineas for a brace of them, and a gentleman in the north of Ireland was known once to have given, for a dog and bitch of this sort, to his tenant, the renewal of a lease of a farm for nine hundred and ninety-nine years, which if this lease had expired, would have cleared to the landlord above two hundred and fifty pounds a year. The compiler himself sold a brace of setters, in the year 1801, for two hundred guineas, to a Captain Baggot. —*Brown—Thornhill.*

Settingdog, *s.* A dog taught to find game, and point it out to the sportsmen.

Shad, *s.* A kind of fish.

Shaft, *s.* An arrow, a missile weapon; a narrow, deep, perpendicular pit; anything straight.

Shag, Skart, Scarfe or Green Cormorant, (*Pelicanus graculus*, Linn.; *Le petit Cormorant, ou le Nigaud*, Buff.) *s.*

The form, the aspect altogether, the outward conformation of all the parts, the character, manners, and habits, and places of abode, of this species, are nearly like those of the cormorant; but they do not associate, and these make their nests on the rugged, shelvy sides and crevices of the rocky precipices or projecting cliffs which overhang the sea, while the others make theirs on the summits above them; and these are at once distinguished from the others by the greenness of the upper, and brownness of the under plumage, and also in being of a much less size—the largest shags weighing only about

four pounds, and measuring nearly two feet six inches in length, and three feet eight in breadth. The bill is of a more slender make, but nearly as long as that of the cormorant; the head, in the male, is crested in the same manner; the middle claw is serrated; and its tail, consisting of twelve stiff feathers stained with green, is also of the same form and hoary or dirty appearance as that of the cormorant; the crown of the head, hinder part of the neck, lower back, and rump, are of a plain black, or very dark green, shining like satin; the upper back, or shoulders, together with the scapulars and wings, are nearly of the same colour, but with a tinge of bronze brown, and each feather is distinctly edged with purple glossed black; the under parts are clouded with dusky dirty white, and brown.—*Bewick.*

SHAGGY, *a.* Ruggedly hairy, rough, rugged.

SHAGREEN, *s.* The skin of a kind of fish, or skin made rough in imitation of it.

SHAMBLING, *a.* Moving awkwardly and irregularly.

SHANK, *s.* The middle joint of the leg, that part which reaches from the ankle to the knee; the bone of the leg; the long part of any instrument; long part of a fishhook.

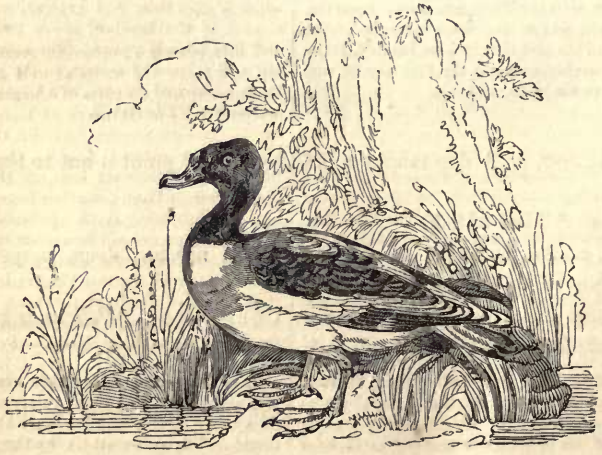
SHEEP, *s.* The animal that bears wool.

To break a Sheep-biting Dog.—Take some wool off a sheep's rump, steep it in train oil, put it in the dog's jaws, and sew up his mouth. For killing poultry, boil a chicken in its feathers, take it hot from the boiler, squeeze the water from it and put it into his jaws, and tie them together.

* * *

"I have a fine pointer," said a gentleman to his friend, "staunch as can be at birds, but I cannot break him from sheep." His reply was, that the best way would be to couple him to the horns of an old ram, and leave him in a stable all night, and the discipline he would receive would prevent his loving field-mutton again. The same person meeting the owner of the dog some time afterwards, accosted him thus: "Well, sir, your pointer is now the best in England, no doubt, from my prescription." "Much the same, sir, for he killed my ram, and ate a shoulder!" —*Sporting Anecdotes.*

SHELDRAKE, or BURROUGH DUCK, (*Anas Tudorna*, LINN.; *La Tudorne*, BUFF.) *s.*



The male of this prettily marked species is somewhat larger than the mallard, measuring about two feet in length, three and a half in breadth, and weighing, commonly, two pounds

ten ounces. The bill is red, with the nail and nostrils black; the upper mandible is broad, flat, and grooved on the edges towards the point, where it has rather a cast upwards; it is also depressed in the middle, and raised into a knob or tubercle at the base. The head and upper part of the neck are of a glossy dark or bottle green; the lower part of the neck, to the breast, is encircled with white, and joined by a broad band of bright orange bay, which is spread over, and covers the breast and shoulders. The back, wing-coverts, rump, upper tail-coverts, and sides of the belly, to the vent and tail, are white; a dusky stripe, tinged with rufous, runs along the middle from the breast, the whole length of the belly; part of the scapulars next the wings are black, and those next the body white; the bastard wing, and some of the first primary quills, are black; the exterior webs of the next adjoining ones are glossed with gold green, which forms the speculum or beauty-spot of the wings; this spot is bounded and partly covered by the orange webs of the three succeeding quill-feathers, which separate it from the scapulars. The tail is white, but some of its feathers are tipped with black; the legs pale red.

The female is less than the male, and her plumage is not so vivid and beautiful. She makes her nest, and rears her young, underground, in the rabbit-holes which are made in the sand-hills near the sea shore: it is chiefly formed of the fine down plucked from her own breast: she lays from twelve to sixteen roundish white eggs, and the incubation lasts about thirty days. During this time, the male, who is very attentive to his charge, keeps watch in the day-time, on some adjoining hillock, where he can see all around him, and which he quits only when impelled by hunger, to procure subsistence. The female also leaves the nest, for the same purpose, in the mornings and evenings, at which times the male takes his turn, and supplies her place. As soon as the young are hatched, or are able to waddle along, they are conducted, and sometimes carried in the bill, by the parents, to the full tide, upon which they launch without fear, and are not seen afterwards out of tide-mark until they are well able to fly; lulled by the roaring of the flood, they find themselves at home amidst an ample store of their natural food, which consists of sand-hoppers, sea-worms, &c. or small shell-fish, and the innumerable shoals of the little fry which have not yet ventured out into the great deep, but are left on the beach, or tossed to the surface of the water by the restless surge.

If this family in their progress from the nest to the sea, happen to be interrupted by any person, the young ones, it is said, seek the first shelter, and squat close down, and the parent birds fly off; then commences that truly curious scene dictated by an instinct analogous to reason, the same as has been already noticed in the mallard and the partridge; the tender mother drops at no great distance from her helpless brood, trails herself along the ground, flaps it with her wings, and appears to struggle as if she were wounded, in order to attract attention, and tempt a pursuit after her. Should these wily schemes, in which she is also aided by her mate, succeed, they both return when the danger is over, to their terrified motionless little offspring, to renew the tender offices of cherishing and protecting them.

These birds are sometimes watched to their holes, which are dug up to the nest, whence the eggs are taken and hatched, and the young reared by a tame duck.

In this way many gentlemen, tempted by the richness of their garb, have their ponds stocked with these beautiful birds; but as they are of a roving disposition, and are apt to stray, or to quit altogether such limited spots, it is generally found necessary to pinion or disable a wing to secure them. The sheldrake has been known to breed with the common duck; but it is not well ascertained whether the hybrids thus produced will breed again or not.

* * *

This species is dispersed in greater or less numbers, over the warm as well as the cold climates, in various parts of the world; they are met with as far north as Iceland in the spring, and in Sweden and the Orkney Islands in the winter. Captain Cook notices them, among other sea fowl, on the coast of Van Diemen's Land; and they have been seen in great numbers at the Falkland Islands. Although they are not numerous on the British and the opposite shores, yet they are common enough in the British Isles, where they remain throughout the year, always in pairs, and occasionally straggle away from the sea coasts to the lakes inland.—*Bewick.*

SHELL, *s.* The hard covering of anything; the external crust; the covering of a testaceous or crustaceous animal; the covering of the seeds of siliquous plants; the covering of kernels; the covering of an egg.

SHELLFISH, *s.* Fish invested with a hard covering, either testaceous, as oysters, or crustaceous, as lobsters.

Sherry, *s.* A kind of sweet Spanish wine.

Shetland Pony, *s.* A horse peculiar to the Shetland isles.

Although the Shetland ponies are exceedingly diminutive in size, they are in other respects excellent. There have been instances of these animals whose height from the foot to the shoulder scarcely exceeded three feet, and a man of ordinary size and strength can lift one of them from the ground with great ease.

The general form of these ponies is very elegant, and their body is thicker and more compact than that of a blood-horse; they have small legs and large manes, their bones are exceedingly small, as is also their head, and that part of the neck which joins to it, the most common colours are grey, bay, and black. The latter are esteemed the hardiest, whilst those that are pied seldom prove good. They sometimes live to the age of thirty years and upwards, notwithstanding the little care that is bestowed on them in sheltering them from the cold, which, in the climate of the Shetland Islands, is peculiarly severe in the winter: but from the circumstance of their being compelled to live out of doors during even the severest months of the year, great numbers are occasionally frozen to death. At this season, when the ground is entirely covered with snow, the wretched animals are compelled to seek subsistence on the sea-weeds, which, once in every twelve hours, are left exposed by the tide.—*Illustrations of Natural History by Le Keux.*

Shin, *s.* The forepart of the leg.

Shingles, *s.* A kind of tetter or herpes that spreads itself round the loins.

Ship, *s.* A ship may be defined a large hollow building made to pass over the sea with sails; a vessel with three masts. *Vide* Yacht.

Shittlecock, *s.* A cork stuck with feathers, and driven by players from one to another with battledoors.

Shoal, *s.* A crowd, a multitude, a throng; a shallow, a sand bank; a number of fishes.

Shoaly, *a.* Full of shoals, full of shallow places.

Shock Dog (*Canis Fotor*), *s.* A lady's dog.

This variety is probably a breed betwixt the king Charles's dog and the small water spaniel, to which last it seems most nearly allied. It has long and slightly curled hair, and its eyes are almost hid in the curls. It is of a small size, and is used in this country and on the

continent as a lap-dog. It is a useless little animal, seeming to possess no other quality than a faithful attachment to its mistress.

I have never seen one of these diminutive little creatures which would take the water, although they possess all the requisites for swimming. This may probably be accounted for from the frequency of their immersion in that element, contrary to their inclination, for the purpose of washing them.

Shoe, *s.* The cover of the foot; the iron plate which defends a horse's hoof.

Shoe, *v.* To fit the foot with a shoe; to cover at the bottom.

Shoeing, *v.* To affix the shoe to the hoof.

The Preparation of the Foot.—We will suppose that the horse is sent to the forge to be shod. If the master would occasionally accompany him there, he would find it much to his advantage. The old shoe must be first taken off. We have something to observe even on this. It was retained on the foot by the ends of the nails being twisted off, turned down, and clenched. These clenches should be first raised, which the smith seldom takes the trouble thoroughly to do; but after going carelessly round the crust, and raising one or two of the clenches, he takes hold first of one heel of the shoe, and then of the other, and by a violent wrench separates them from the foot, and by a third wrench, applied to the middle of the shoe, he tears it off. By this means he must enlarge every nail hole, and weaken the future hold, and sometimes tear off portions of the crust, and otherwise injure the foot. The horse generally shows by his flinching that he suffers by the violence with which this preliminary operation is performed. The clenches should always be raised or filed off; and where the foot is tender, or the horse is to be examined for lameness, each nail should be partly punched out. Many a stub is left in the crust, the source of future annoyance, when this unnecessary violence is used.

The shoe having been removed, the smith proceeds to rasp the edges of the crust. Let not the stander-by object to the apparent violence which he uses, or fear that the foot will suffer. It is the only means he has, with safety to his instruments, to detect whether any stubs remain in the nail-holes, and it is the most convenient method of removing that portion of the crust into which dirt and gravel have insinuated themselves.

Next comes the important process of paring out, with regard to which it is almost impossible to lay down any specific rules. This, however, we can say with confidence, that more injury has been done by the neglect of paring, than by carrying it to too great an extent. The act of paring is a work of much more labour than the proprietor of the horse often imagines; the smith, except he be overlooked, will give himself as little trouble about it as he can; and that, which in the unshod foot would be worn away by contact with the ground, is suffered to accumulate month after month, until the elasticity of the sole is destroyed, and it can no longer descend, and the functions of the foot are impeded, and foundation is laid for corn, and contraction, and navicular disease, and inflammation. That portion of horn should be left on the sole, which will defend the internal parts from being bruised, and yet suffer the external sole to descend. How is this to be measured? The strong pressure of the thumb of the smith will be the best guide. The buttress, that most destructive of all instruments, being banished from the respectable forge, the smith sets to work with his drawing knife, and he removes the growth of horn until the sole will yield, although in the slightest possible degree, to the very strong pressure of his thumb. The proper thickness of horn will then remain.

If the foot has been previously neglected, and the horn is become very hard, the owner must not object if the smith resorts to some means to soften it a little; and if he takes one of his flat irons, and, having heated it, draws it over the sole, and keeps it a little while in contact with it. When the sole is thick, this rude and apparently barbarous method can do no harm, but it should never be permitted with the sole that is regularly pared out.

The quantity of horn to be removed in order to leave the proper degree of thickness will vary with different feet. From the strong foot a great deal must be taken. From the concave foot the horn may be removed until the sole will yield to a moderate pressure. From the flat foot little need be pared; while the pumiced foot will spare nothing but the ragged parts.

The paring being nearly completed, the knife and the rasp of the smith must be a little watched, or he will reduce the crust to a level with the sole, and thus endanger the bruising of the sole by its pressure on the edge of the seating. The crust should be reduced to a perfect level all round, but left a little higher than the sole.

The heels will require very considerable attention. From the stress which is thrown on the inner heel, and from the weakness of the quarter there, it usually wears considerably faster than the outer one; and if an equal portion of horn were pared from it, it would be left lower than the outer heel. The smith

should, therefore, accommodate his paring to the comparative wear of the heels, and be very careful to leave them precisely level.

If the reader will recollect what we have said of the intention and action of the bars, he will readily perceive that the smith should be checked in his almost universal fondness for opening the heels, or, more truly, removing that which is the main impediment to contraction. That portion of the heels between the inflection of the bar and the frog should scarcely be touched, at least nothing but the ragged and detached parts should be cut away. The foot may not look so pretty, but it will last longer without contraction.

The bar likewise should be left fully prominent, not only at its first inflection, but as it runs down the side of the frog. The heel of our shoe is designed to rest partly on the heel of the foot, and partly on the bar, for reasons that have been already stated. If the bar is weak, the growth of it should be encouraged, and it should be scarcely touched at the shoeing until it has attained a level with the crust. We recal to the recollection of our readers the observation which we have before made, that the destruction of the bars not only leads to contraction by removing a powerful impediment to it, but by adding a still more powerful cause in the slanting direction which is given to the bearing at the heels, when the bar does not contribute to the support of the weight.

It will also be apparent that the horn between the crust and the bar should be carefully pared out. Every horseman has observed the relief which is given to the animal lame with corns when this angle is well thinned; a relief, however, which is but temporary, for when the horn grows again and the shoe presses upon it, the torture of the animal is renewed.

The degree of paring to which the frog must be subjected will depend on its prominence, and on the shape of the foot. The principle has already been stated, that it must be left so far projecting and prominent, that it shall be just within and above the lower surface of the shoe, it will then descend with the sole sufficiently to discharge the functions which we have attributed to it. If it be lower it will be bruised and injured; if it be higher it cannot come in contact with the ground, and thus be enabled to do its duty. The ragged parts must be removed, and especially those occasioned by thrush, but the degree of paring must depend entirely on this principle.

It appears, then, that the office of the smith requires some skill and judgment in order to be properly discharged; and the horse proprietor will find it his interest occasionally to visit the forge and complain of the careless, or idle, or obstinate, and reward, by some trifling gratuity, the expert and diligent. He should likewise remember that a great deal more depends on the paring out of the foot than on the construction of the shoe; that few shoes, except they press upon the sole, or are made outrageously bad, will lame the horse; but that he may be very easily lamed from ignorant and improper paring out of the foot.

The putting on of the Shoe.—The foot being thus prepared, the smith looks about for a shoe. He should select one that as nearly as possible fits the foot, or may be altered to the foot. He will sometimes care little about this, for he can easily alter the foot to the shoe. The toe-knife is a very convenient instrument for him, and plenty of horn can be struck off with it, or removed by the rasp, to make the foot as small as the shoe; while he cares little, although by this destructive method the crust is materially thinned where it should receive the nail, and the danger of puncture is increased, and the danger of pressure upon the sole is increased, and a foot so artificially diminished in size will soon grow over the shoe, to the hazard of considerable or permanent lameness.

While choosing the shoe we must once more refer to the shape of our pattern shoe; the web is of equal thickness from toe to heel. A shoe, thinner at the heel than at the toe, by letting down the heel too low, is apt to produce sprain of the flexor tendon, and a shoe thicker at the heels than at the toe is fit only to elevate the frog, to the destruction of its function, and to its own certain disease, and also to press upon and to batter and to bruise that part of the foot which is soonest and most destructively injured.

The Hinder Shoe.—In forming the hinder shoe it should be remembered that the hind limbs are the principal instruments in progression, that in every act of progression, except the walk, the toe is the point on which the whole frame of the animal turns, and from which it is propelled. This part, then, should be strengthened as much as possible; and, therefore, the hinder shoes are made broader at the toe than the fore ones, and the toe of the foot, which is naturally broader than that of the fore-foot, is still further widened by rasping. Another good effect is produced by this, that the hinder foot being shortened there is less danger of overreaching or forging, and especially if the shoe be wider on the foot surface than on the ground one; and thus the shoe is made to slope inward, and is a little within the toe of the crust.

The shape of the hinder foot is somewhat different from that of the fore foot; it is straighter in the quarters, and the shoe must

have the same shape. For carriage and draught horses generally, calkins may be put on the heels, because the animal will be thus enabled to dig his toe more firmly into the ground, and urge himself forward, and throw his weight into the collar with greater advantage. But the calkins must not be too high, and they must be of an equal height on each heel; otherwise, as has been stated with regard to the fore feet, the weight will not be fairly distributed over the foot, and some part of the foot or of the leg will materially suffer. The nails in the hinder shoe may be placed nearer to the heel than in the fore shoe, because, from the comparative little weight and concussion thrown on the hinder feet, there is not so much danger of contraction.

Different kinds of Shoes.—The shoe will vary in substance and weight with the kind of foot, and the nature of the work. A weak foot should never wear a heavy shoe, nor any foot a shoe that will last longer than a month. Here, perhaps, we may be permitted to caution the horse-proprietor against having his cattle shod too much by contract, unless he binds down his farrier or surgeon to remove the shoes once at least in every month; for if the contractor, by a heavy shoe and a little steel, can cause five or six weeks to intervene between the shoeings, he will do so, although the feet of the horse must necessarily suffer. The shoe should never be heavier than the work requires. An ounce or two in the weight of the shoe will sadly tell before the end of a hard day's work. This is acknowledged in the hunter's shoe, which is narrower and lighter than that of the hackney with even smaller feet than the hunter; and it is more decidedly acknowledged in the racer, who wears a shoe only sufficiently thick to prevent it from bending when used.

The Hunting Shoe.—The hunter's shoe is different from that of the hackney in shape as well as weight. It is not so much bevelled off as the common concave seated shoe. Sufficient space alone is left for the introduction of a picker between the shoe and the sole, otherwise, in going over heavy ground, the clay will get in, and by its tenacity loosen, and even tear off the shoe. The heels likewise are somewhat shorter, that they may not be torn off by the toe of the hind-feet when galloping fast, and the outer heel is frequently and injudiciously turned up to prevent slipping. The reader will remember what we have just said of this. If calkins are necessary, let, at least, both heels have an equal bearing.

The Bar-Shoe.—A bar-shoe is a very useful contrivance. It is the continuation of the common shoe round the heels, and by means of it the pressure may be taken off some tender part of the foot and thrown on another which is better able to bear it, or more widely and equally diffused over the whole foot. It is principally resorted to in cases of corn, the seat of which it perfectly covers—in pumiced feet, the soles of which may be thus elevated above the ground and secured from pressure—in sand-crack, when the pressure may be removed from the fissure and thrown on either side of it—in thrushes, when the frog is tender, or is become cankered, and requires to be frequently dressed, and the dressing can by this means alone be retained. In these cases the bar-shoe is an excellent contrivance, if worn only for one or two shoeings, or as long as the disease requires it to be worn, but it must be left off as soon as it can be dispensed with. If it be used for the protection of a diseased foot, however it may be chambered and laid off the frog, it will soon be flattened down upon it; or if the pressure of it be thrown on the frog to relieve the sand-crack or the corn, that frog must be very strong and healthy which can long bear the great and continued pressure. More mischief is often produced in the frog than previously existed in the part which was relieved. It will be plain that in the use of the bar-shoe for corn or sand-crack, the crust and the frog should be precisely on a level, and the bar should be the widest part of the shoe, to afford as extended bearing as possible on the frog, and therefore less likely to be injurious. Bar-shoes are evidently not safe in frosty weather; they are never safe when much speed is required from the horse, and they are apt to be wrenched off in a heavy, clayey country.

Tips are short shoes reaching only half round the foot, and worn while the horse is at grass to prevent the crust being torn by the occasional hardness of the ground, or by the pawing of the animal; and the quarters at the same time being free, the foot disposed to contract has a chance of expanding and regaining its natural shape.

The Expanding Shoe.—Our subject would not be complete if we did not describe the supposed expanding shoe. It is either seated or concave like the common shoe, with a joint at the toe, by which the natural expansion of the foot is said to be permitted, and the injurious consequences of shoeing prevented. There is, however, this radical defect in the jointed shoe, that the nails occupy the same situation as in the common shoe, and prevent, as do the nails of the common shoe, the gradual expansion of the sides and quarters, and allow only of a hinge-like motion at the toe. This is a most imperfect accommodation of the expansion of the foot to the action of its internal parts, and even this accommodation is afforded in the slightest possible degree, or rather can scarcely be afforded at all. Either the nails fix the sides and quarters as in the common shoe, and

then the joint at the toe is useless; or, if that joint merely opens like a hinge, the nail-holes in the shoe can no longer correspond with those in the quarters which are unequally expanding at every point; and, therefore, there will be more stress on the crust at these holes, which will not only enlarge them, and destroy the fixed attachment of the shoe to the hoof, but will often tear away portions of the crust. This has, in many cases, been found to be the effect of the jointed shoe: the sides and quarters of the foot have been broken until it has become difficult to find nail-hold. This shoe, to answer the intended purpose, should consist of many joints, running along the sides and quarters, which would make it too complicated and expensive, and frail for general use.

While the shoe is to be attached to the foot by nails, we must be content with the concave seated one, taking care to place the nail-holes as far from the heels, and particularly from the inner heel, as the state of the foot and the nature of the work will admit; and where the country is not too heavy nor the work too severe, even omitting the nails on the inner side of the foot. Shoes nailed on the outer side, and at the toe, are more secure than some would imagine, while the inner quarter will be left free, to prevent contraction, or to arrest its progress.

The attempt, however, to lessen the evils produced by shoeing is most praiseworthy; and men like Mr. Bracey Clark deserve the respect and thanks of the public, although their labours may not be crowned with success. Every contrivance permanently to fix the shoe on the foot without the use of nails, has failed; but a make-shift shoe has been contrived, and is to be procured at most saddlers, which is easily carried in the pocket, and put on in a minute or two if a shoe is lost in hunting or on the road; and which will remain securely attached to the foot, and prevent injury to it, during a journey of thirty or forty miles.

Felt or Leather Soles.—When the foot is bruised or inflamed, the concussion or shock produced by the hard contact of the elastic iron on the ground gives the animal much pain, and causes a short and feeling step, or even lameness, and aggravates the injury or disease. A strip of felt or leather is sometimes placed between the seating of the shoe and the crust, which, from its want of elasticity, deadens, or materially lessens the vibration or shock, and the horse treads more freely, and is evidently relieved. This is a very good contrivance while the inflammation or tenderness of the foot continues, but a very bad practice if constantly adopted. The nails cannot be driven so surely or so securely when this substance is interposed between the shoe and the foot; the contraction and swelling of the felt or leather, from the effect of moisture or dryness, will soon render the attachment of the shoe less firm; there will be too much play upon the nails; the nail-holes will enlarge, and the crust will be broken away.

After wounds or extensive bruises of the sole, or where the sole is thin and flat and tender, it is sometimes covered with a piece of leather, fitted to the sole, and nailed on with the shoe. This may be allowed as a temporary defence of the foot; but there is the same objection to its permanent use from the insecurity of fastening, and the strain on the crust, and the frequent chipping of it: and there are these additional inconveniences, that if the hollow between the sole and the leather be filled with stopping and tow, it is exceedingly difficulty to introduce them so evenly and accurately as not to produce some partial or injurious pressure—that a few days' work will almost invariably so derange the padding as to produce partial pressure—that the long contact of the sole with stopping of almost every kind will produce, not a healthy, elastic horn, but horn of a scaly, spongy nature; and that if the hollow be not thus filled, gravel and dirt will insinuate themselves, and cause unequal pressure, and eat into and injure the foot.—*The Horse.*

SHOOT, *v.* To discharge anything so as to make it fly with speed or violence; to discharge from a bow or gun; to let off; to perform the act of shooting; to germinate; to be emitted; to protuberate; to jut out; to pass as an arrow; to feel a quick pain.

Instructions in Shooting.—But (to be brief, which is here my study) allow me to suggest an humble attempt for the instruction of the complete novice, first, let him take a gun that he can manage, and be shown how to put it to his shoulder, with the breach and sight on a level, and make himself master of bringing them up to a wafer.

Then, with a wooden or bone driver (instead of a flint) let him practise at this mark; and when he thinks he can draw his trigger without flinching, he may present the gun to your right eye, by which you will see, at once, if he is master of his first lesson. In doing this he must remember, that the moment the gun is brought up to the centre of the object,

the trigger should be pulled, as the first sight is always unquestionably the best.

Then send him out to practise at a card with powder, till he has got steady, and afterwards load his gun, occasionally, with shot, but never let the time of your making this addition be known to him; and the idea of it being, perhaps, impossible to strike his object, will remove all anxiety, and he will soon become perfectly collected.

The intermediate lesson of a few shots at small birds may be given; but this plan throughout must be adopted at game, and continued, in the first instance, till the pupil has quite divested himself of all tremor at the springing of a covey, and observed in the last, till most of his charges of shot have proved fatal to the birds. If he begins with both eyes open, he will save himself the trouble of learning to shoot so afterwards. An aim thus, from the right shoulder, comes to the same point as one taken with the left eye shut, and it is the most ready method of shooting quick.

Be careful to remind him (as a beginner) to keep his gun moving, as follows: before an object, crossing; full high for a bird rising up, or flying away very low; and between the ears of hares and rabbits running straight away. All this, of course, in proportion to the distance; and if we consider the velocity with which a bird flies, we shall rarely err by firing, when at forty yards, at least five or six inches before it. Till the pupil is *au fait* in all this, he will find great assistance from the sight, which he should have precisely on the intended point, when he fires. He will thus, by degrees, attain the art of killing his game in good style, which is to fix his eyes on the object, and fire the moment he has brought up the gun. He may then ultimately acquire the knack of killing snap shots, and bring down a November bird the moment it tops the stubble, or a rabbit popping into a furze-brake, with more certainty than he was once used to shoot a young grouse in August, or a partridge in September.

Many begin with very quick shooting, and kill admirably well, but are often apt not to let their birds fly before they put up their guns, and therefore dreadfully mangle them, and, I have already observed, are not such every-day shots as those who attain their rapid execution on a slow and good principle.

* * *

As shots in the field, at game, Mr. Jenkins, near Petworth, Sussex, and Cottingham, who was formerly gamekeeper to Lord Roos, are perhaps the best. The former has killed twenty brace of partridges in a day, at forty shots, without selecting the shots, but took them fairly as they happened; and in four days' shooting, has never missed. The latter I was out with when he killed, in two days, forty-three successive shots (many of them in covert) at partridge, pheasant, woodcock, and hare; and his style of shooting, when open, and he could give time, was most regularly deliberate.

* * *

Should different guns be employed, the shooter should have all the locks made, if possible, to require exactly the same pull to bring them to action; there is nothing deceives or disconcerts him more than shooting one day with a stiff, and the next with an easy going lock; the transition from that which goes off with a slight, to that where a hard touch is necessary, will often cause the most expert to miss his bird.

* * *

If a rival shooter (some stranger) races to get before you, push him hard for a long time, always letting him have rather the advantage, and then give him the double without his seeing you. Having done this, go quietly round (supposing you have been beating up wind); and, on reaching the place where you began, work closely and steadily the whole of the ground or covert that you have both been racing over, and you will be sure to kill more game than him, who is beating and shooting in haste, through fear of your getting up to him; and (if the wind should rise) driving the dispersed, and consequently closest lying birds to your beat, as fast as he finds them.

* * *

Beware of the muzzle of the gun being kept hanging downwards; when so carried, the shot is apt to force its way from the powder, especially in clean barrels; if it happens that a space of sixteen or eighteen inches is thus obtained, and the gun fired with its point below the horizon, it is ten to one but the barrel bursts. There are other perilous consequences besides those that generally accompany the disruption of a barrel, for the men, horses, and dogs, are in perpetual danger of being shot when a gun is carried in the before-mentioned pendent manner. * * *

When a gun begins to exhibit symptoms of having done its work, the sooner a man discards it the better. An injured barrel or enfeebled lock may prove fatal to the owner or his associates. Accidents every day occur, and very lamentable consequences proceed, from a culpable neglect in retaining arms which should be declared unserviceable and disused.

I had once a favourite gun, which from constant wear and tear exhibited unequivocal weakness in the locks, and which I had been earnestly recommended by a veteran sportsman to condemn. On a cold and rainy day, I was with my friend O'M——, shooting woodcocks in the heath, and having sprung several, which from the severity of the weather

were wild as hawks, we marked them into a ravine, and determined to tie up the dogs and endeavour to steal upon them. To keep my gun dry I placed it under the skirt of my jacket, with the muzzle pointing downwards. My companion and our attendant were busy coupling the dogs, when the gun exploded, and the charge passing between O'M——'s bosom and the back of a dog he was in the act of securing, buried itself at the foot of the keeper, covering him with mud and gravel. From the close manner in which we were all grouped, how the shot could have entered the ground without killing men or dogs, or both, was miraculous. I was desperately frightened, and from that moment forswore for ever, the use of weakened locks and attenuated barrels.

* * *

In March, 1799, Sir John Swinborne, having flashed off his gun, which was single barrelled with a patent antechambered breech, proceeded to the dog-kennel; in his opinion, at least five minutes must have elapsed before he began to load; having primed, he poured the charge from the top of the flask into the barrel, when the whole copper flask, containing nearly a pound of gunpowder, instantly exploded. A large piece of copper struck the right eye, and injured the bone above, so that it continued to exfoliate for two years. The lock remained at half bent, and it cannot be doubted that some tow, which had been left in the barrel or chamber, continued on fire from the time of flashing off, and occasioned the misfortune.

In every instance but one, where the particulars have been ascertained, of the numerous accidents of the above description, the explosion has happened upon the second time of pouring powder into the barrel on that day; which is strong evidence of the cause here suggested.

* * *

The following sporting precepts may be serviceable to inexperienced shooters:—

First—If you or your dog should, at any time, get a severe blow, let the wounded part be instantly fomented with water, as hot as can be borne, for at least half an hour, and you will thereby reduce your suffering, or impediment from sport, to at least half its duration.

Secondly—If you burn yourself in shooting, or otherwise, wrap the part affected immediately in cotton, the application of which, it has been proved, acts like magic with a burn.

Thirdly—If you should take cold, bathe your feet in hot water; if a little salt or bran is, or both are, added, so much the better. Get into a bed warmed, with a little brown sugar sprinkled on the coals, and take some whey, or whatever you can get to promote perspiration.

Fourthly—Never fast too long, and avoid, whenever you can, fagging too hard.

Fifthly—Never go out with quite an empty stomach, to wait for wild fowl, particularly in the morning. Should you wish to start before any one is up, you might always have left for you over night, a crust of bread, or a biscuit, with a glass of milk, which, with a little sugar, nutmeg, ginger, and the yolk of an egg, may be good in a moment, and this is better than what is called a "doctor," (rum and milk), because you then dispense with taking spirit in a morning, the very bad habit of which, should always be avoided, except in a country where the chances of ague might justify your taking a little purl.

Sixthly—Never sit down in wet feet, or with wet clothes on any part of your body, but, if a change is not at hand, keep in motion, or go to bed, till one can be procured. Or, if you want to start again, when refreshed, first wet your feet with either spirits or essence of mustard, and then be as quick as possible in taking your refreshment. Many people prefer applying the spirit to the inside, instead. This is not so well, because spirit alone always flies to the head, while strong beer, on the contrary, would warm the body.

I shall here conclude, under this head, with the *multum in parvo* advice of the great Dr. Boerhaave; keep the body open, the head cool, and the feet warm.—*Hawker—Daniel—Wild Sports.*

SHOOTER, *s.* One who shoots; an archer, a gunner.

SHORTWINGED, *a.* Having short wings. So hawks are divided into long and short winged.

SHOT, *s.* The act of shooting; the flight of a shot; the charge of a gun; bullets or small pellets for the charge of a gun; anything discharged from a gun, or other instrument; a sum charged, a reckoning.

Shot.—The choice of this article is highly worthy of the sportsman's care. It should be equal, round, and void of cavities. The patent milled shot is, at this time, to be preferred to all other sorts, and is in such general use, that the instructions which here follow on the size of shot to be adopted in the different chases, must be understood to relate to the patent shot only.

The difference, however, which subsists

between the sizes of patent and of common shot, will be hereafter shown by means of a table, denoting the number of pellets contained in a given weight of each, so that in cases where the former cannot be procured, it will be easy to adopt the rules there laid down, to the latter, by only taking the same number of grains in the common, as directed to be used for the patent shot.

It is extremely important for the success of the chase, that the sportsman should proportion the size of his shot, as well to the particular species of game he means to pursue, as the season of killing it. Thus in the first month of partridge-shooting, shot No. 1, should be used; for since, at this time, the birds spring near at hand, and we seldom fire at more than the distance of forty yards, if the shooter takes his aim but tolerably well, it is almost impossible for a bird at this distance to escape in the circle or disk which the shot forms.

Hares also, at this season of the year, sit closer, and being at the same time thinly covered with fur, may easily be killed with this sized shot at thirty or thirty-five paces.

In snipe and quail-shooting this sized shot is peculiarly proper, for, in using a larger size, however true the sportsman may shoot, yet he will frequently miss, the objects being so small that they have great chance of escaping in the vacant spaces of the circle or disk. Yet there are many sportsmen who shoot snipes, quails, and fieldfares, in countries where they abound, with the sizes six and seven of the common shot, the last of which is called mustard-seed.

About the beginning of October, at which time the partridges are stronger in the wing, No. 3 is the proper shot to be used. This size seems to be the best of any; it preserves a proper medium between shot too large and that which is too small, and will kill a hare from the distance of thirty-five or forty paces, and a partridge at fifty, provided the powder be good. It will serve also for rabbit-shooting. In short, it is excellent for all seasons, and many sportsmen use no other the season round.

It is true that distant objects are frequently missed for want of large shot, but then these bear no proportion to the number that are daily missed, by using shot of too large a size, especially with the feathered game. If a man was to shoot constantly with shot number five, for one partridge which he might chance to kill with a single pellet at the distance of eighty paces, he would miss twenty birds at eighty paces, which would in such case escape in the vacant spaces of the circle. But if the sportsman expressly purposes to shoot wild ducks or hares, then indeed he had better use the number five. However, in shooting with a double barrel gun, it may be prudent to load one of the barrels with large shot for the necessary occasions, and if in any case large shot is required, number five will be found to be better than any other, for its size is not so large as to prevent it from garnishing or being equally spread in the circle, and it can at the same time perform, in effect, all that a larger sized shot can do, which garnishes but very little, if any at all.

In order, therefore, to show clearly, and at one view, the comparative difference in garnishing of shot of different sizes, we here subjoin a table which indicates the number of pellets precisely composing an ounce weight of each sort of shot, the patent and the common, commencing at the smallest size in each.

PATENT SHOT.

		Pellets.
No. 8	1 ounce	620
7	—	480
+	—	300
1	—	220
2	—	180
3	—	157
4	—	105
5	—	83

COMMON SHOT.

		Pellets.
No. 7	1 ounce	350
6	—	260
5	—	235
4	—	190
3	—	140
2	—	110
1	—	95

Shot compared according to Hawker:—

MOULD SHOT.

	No. of pellets to 1 oz.
L G	5½
M G	hardly 9
S G	1
S S G	15
S S S G	17

PATENT SHOT.

	No. of pellets to 1 oz.
A A	40
A	50
B B	58
B	75
1	82
2	112
3	135
4	177
5	218
6	280
7	341
8	600
9	984
10	1726

The pleasure of using and counting the dust shot I leave to those who recommend it.

The shot of different manufacturers varies

much in size: for example, an ounce of No. 7, from Messrs. Walker and Parker, amounts to 341 pellets; and the same weight, from Mr. Beaumont (late Preston), 398; and in some places the numbers are reversed.

Many sportsmen recommend the use of unglazed shot; others wet their shot with oil. I have tried both these plans repeatedly, but could not find sufficient advantage in either to justify my recommending them. The object of both is to prevent the gun from leading; and as they can do no harm, I should if a choice readily offered, prefer using the shot unglazed, or oiled, for the chances of any trifling advantages which may be thereby derived. * * *

If I mistake not, you are shooting grouse with No. 4.

Agilis. I was told that so large a bird required large shot.

Peritus. No doubt there is greater difficulty in reaching a vital part through a large opposing substance than a small one; but you must remember that at this season the whole plumage of birds has not yet grown, the muscles and sinews are not yet so strong and firm as they will be; and the flight of all birds is slower than in winter; on such account I would use much smaller shot now than later in the season; and indeed you will find sevens now as efficient as fours will be in two months' time. You must remember that to bring down a bird you must either strike it in a vital part, or impede its flight, and the fewer the shots that strike, the less likely you are to attain that object. I once fired a small bullet through a black cock, and he flew so far that he was only found by accident afterwards. But I will repeat to you my ideas as to the sizes of shot best calculated both for England and Scotland, as we are upon the subject:—

Partridge, hare.—From September 1 to October 1, No. 7.

Partridge, hare, woodcock, rabbit, pheasant. —From October 1 to the end of the season, No. 6.

Ducks.—No. 5 or 4.

Roe deer.—B B at all times.

Grouse.—From August 12 to September 1, No. 7; from September 1 to September 25, No. 6; from September 25 to the end of the season, No. 5.

Black game.—From August 20 to September 1, No. 7; from September 1 to September 10, No. 6; from September 1 to October 10, No. 5; from October 10 to the end of the season, No. 4 or 5, as the gun may shoot close or scatter: if it scatter, the smaller shot of the two.

* * *

The greater or lesser diameter of the bore cannot produce any sensible difference in the closeness or wideness with which the shot is thrown, provided the charge be the same in both pieces. We have subjected this matter to the test of experiment, and the result has accordingly been that a barrel of 22 or 24, which is the largest calibre usually employed in fowling-pieces, threw its shot as closely as one of the smallest calibre, viz. of 30 or 32.

There is a curious circumstance attending the shot of barrels, which is, that sometimes the grains of lead, instead of being equally distributed over the space they strike, are thrown in clusters of ten, twelve, fifteen, or more, whilst several considerable spaces have not a single grain in them; sometimes a cluster of this kind consists of one-third or one-half of the charge, and it also happens sometimes, though more rarely, that the whole charge collects itself into one mass, so as to pierce a board near an inch thick, at the distance of forty or forty-five paces. Small barrels are said to be more liable to this than large ones, and M. de Marolles says that this is especially the case when barrels are new, and when they are fresh washed. He mentions a double-barrelled piece of 52 calibre, which was particularly liable to this clustering and lumping of the shot, but adds that the same thing did not happen to him with other barrels of 26 and 28 calibre, which he had used before. The lumping also may perhaps depend upon the wadding employed.

With regard, then, to the extraordinary closeness with which some pieces are said to throw the shot, we certainly shall not take it upon us to assert that persons who speak of them wish to deceive us; but we do most firmly believe that they deceive themselves, and that their accounts proceed either from their belief that a gunsmith, by superior skill and care, is able to make such, or from their once having seen a piece accidentally lump its shot in the manner described above. The result of our experience, however, is very unfavourable to this prevailing opinion, for we do affirm that after having fired at a mark times without number, we have never yet found a barrel, which, at the distance of fifty paces, would throw its whole charge with regularity, we will not say into the breadth of a hat, but into a space of three feet square.

* * *

Patent Shot.—It is a fact stated to have been determined by repeated observation, that a bird killed with patent shot will turn green twenty-four hours sooner than one killed at the same time with the common shot; and this accelerated putrefaction is said to arise from the quantity of copperas used in preparing the lead for this particular manufacture. —*Essay on Shooting.—Hawker.—Hints to Grown Sportsmen.*

Shot Belt.—Always have the tops of your shot belts made to fit nicely into the muzzle of your gun; by which means, in the process of drawing your charge, you can empty your shot into them without losing a grain.—*Hawker.*

Shotten, *a.* Having ejected the spawn.

Shovelboard, *s.* A long board on which they play by sliding metal pieces at a mark.

Shough, *s.* A kind of shaggy dog, a shock.

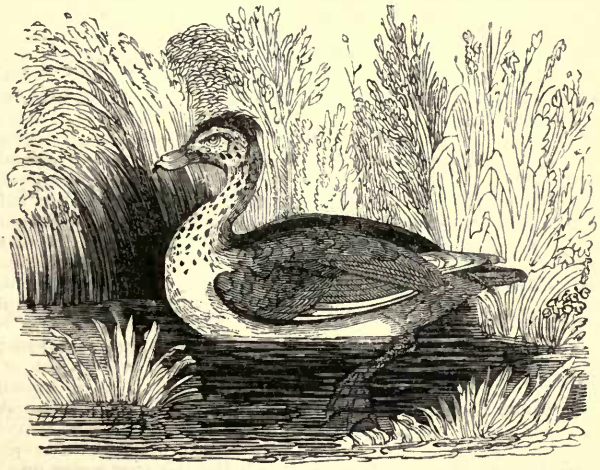
Shoulder, *s.* The joint which connects the arm to the body; the upper joint of the foreleg of a beast; the upper part of the back; the shoulders are used as emblems of strength.

Shoulderbelt, *s.* A belt that comes across the shoulder.

Shouldershotten, *a.* Strained in the shoulder.

Shoulderslip, *s.* Dislocation of the shoulder.

Shoveller, *s.* A bird of the duck tribe.



Blue Wing Shoveller, Kertlucock, or Broad Bill (*Anas Clypeata*, Linn.; *Le Souchet*, Buff.)—The shoveller is less than the wild duck, commonly weighing about twenty-two ounces, and measuring twenty-one inches in length. The bill is black, three inches long, very broad or spread out, and rounded like a spoon at the end, with the nail hooked inward, and small.

The female is smaller than the male, from which she also differs greatly in the colours of her plumage, the coverts and spangle-spot on her wings being less brilliant, and the other parts composed of white, grey, and rusty, crossed with curved dusky lines, giving her much the appearance of the common wild duck. She makes her nest, lined with withered grasses, on the ground, in the midst of the largest tufts of rushes or coarse herbage, in the most inaccessible parts of the shaky marsh. She lays ten or twelve pale, rusty-coloured eggs; and as soon as the young are hatched, they are conducted to the water by the parent birds, who watch and guard them with the greatest care.

They are at first very shapeless and ugly, for the bill is then almost as broad as the body, and seems too great a weight for the little bird to carry. Their plumage does not acquire its full colours until after the second moult.

It has not yet been ascertained whether the shoveller breeds in England, where, indeed, it is a scarce bird.

This species is of so wild, shy, and solitary a disposition, that all attempts hitherto made to domesticate them have failed.

The anas muscaria of Linnæus (*Le Souchet à ventre blanc* of Brisson) differs only from this in having the belly white, and is considered merely as a variety of the same species.

Red-breasted Shoveler.—Size of a common duck. This species is sometimes taken in the decoys of Lincolnshire.—*Bewick.*

SHREWMOUSE, *s.* A mouse of which the bite was anciently supposed venomous.

SHRILL, *a.* Sounding with a piercing, tremulous, or vibratory sound.

SHRIMP, *s.* A small crustaceous vermiculated fish; a little wrinkled man, a dwarf.

SHRUB, *s.* A small tree; spirit, acid, and sugar, mixed.

SHUFFLECAP, *s.* A play at which money is shaken in a hat.

SHUTTLECOCK, *s.* A cork stuck with feathers, and beaten backward and forward.

SHY, *a.* Cautious; keeping at a distance, unwilling to approach.

SICKLY, *a.* Not healthy, disordered; faint, weak, languid.

SIDESADDLE, *s.* A woman's seat on horseback.

SIEVE, *s.* Hair or lawn strained upon a hoop, by which flour is separated from bran; an implement to winnow corn.

SIFT, *v.* To separate by a sieve; to separate, to part.

SIGHT, *s.* Perception by the eye, the sense of seeing; act of seeing or beholding; eye, instrument of seeing; aperture pervious to the eye, or other points fixed to guide the eye, as the sight of a quadrant, gun, &c.

SILICIOUS, *a.* Made of hair.

SILKEN, *a.* Made of silk; soft, dressed in silk.

SILVER, *s.* A white and hard metal, next in weight to gold. It is harder but not so malleable: it ignites before it melts, and requires intense heat to fuse it.

SILVER, *a.* Made of silver; white like silver; having a pale lustre; soft of voice.

SINEW, *s.* A tendon, the ligament by which the joints are moved.

SINEWED, *a.* Furnished with sinews; strong, firm, vigorous.

SINEWY, *a.* Consisting of a sinew; nervous, strong, vigorous.

SIPHON, *s.* A pipe through which liquors are conveyed.

SIRE, *s.* A father; it is used of beasts, and particularly horses.

SITTER, *s.* One that sits; a bird that broods.

SIZE, *s.* Bulk, comparative magnitude; condition; any viscous or glutinous substance.

SKATE, *s.* A flat sea fish; a sort of shoe armed with iron, for sliding on the ice.

SKEGGER, *s.* Skeggers are the produce of such sick salmon as might not go to sea.

SKEIN, *s.* A knot or thread of silk wound; a knot of gimp or gut.

SKIN, *s.* The natural covering of the flesh; hide, pelt, that which is taken from animals to make parchment or leather.

SKIN, *v.* To flay or divest of the skin.

SKIRT, *v.* To border, to go along the edge, as to skirt a cover.

SKITTISH, *a.* Shy, easily frighted; wanton, volatile; changeable, fickle.

SKITTLE, *s.* A piece of wood like a sugar loaf used in the play of skittles.

SKITTLES, *s.* A game called ninepins.

SKUA (*Lestris catarractes*, TEMMINCK), *s.* A species of eagle.

This species is rather superior in size to the raven; weight three pounds; length two feet; the bill is an inch and three quarters long, black, and much hooked at the end; is covered, for more than half its length, with a kind of black cere; the upper part of the head, neck, back, and wings, deep brown; the feathers margined with ferruginous; about the forehead and chin tinged with ash-colour; the breast, and all beneath, pale dusky ferruginous; the quills are brown, white at the base; tail deep brown; roots and shafts white; the legs are black, rough, and scaly; talons black, strong, and much hooked.

This is a bold rapacious bird, and preys on the lesser gulls, as well as fish; it is said to attack the eagle, and even man, if he approaches their nest. It breeds in the Orkney Islands, and is much esteemed in the Isle of Foulah, from a supposition that it defends the flocks from the eagle: it is rarely seen in the south. One in the museum of Dr. Latham, was killed at Greenwich; and the only other instance we are furnished with, of this species being observed in the south of England, was shot at Sandwich, in Kent, in the winter of 1800.—*Montagu.*

SKULK, *v.* To hide, to lurk in fear or malice.

SKULL, *s.* The bone that encloses the head; a shoal of fishes, herrings particularly.

SKYCOLOUR, *s.* An azure colour, the colour of the sky.

SKYLARK (*Alauda arvensis*, LINN.), *s.* A lark that mounts and sings.

The length of this species is seven inches; bill dusky; the base of the upper mandible yellowish; the feathers on the top of the head are dusky, bordered with rufous brown; they are rather long, and erectable in form of a short crest; the hind part is plain, inclining to ash-colour; on the upper parts of the body the feathers are reddish brown, darker in their middle, their edges pale; the under parts are dirty buff-colour, darkest on the neck and breast, which parts are streaked with dusky; quills brown, lighter on the outer webs and tips; the tail is dusky brown, the two middle feathers darkest, with light rufous margins; the outer feather is white on the outer web and tip of the inner; the second feather white on the outer web only; the third is inclining to white on the margin of the outer web; legs dusky in old birds, but lighter in young; claws dusky; the hind one very long and straight.

This bird is common in the greater part of this kingdom, but most plentiful in the more open and highest cultivated situations abounding with corn, and rarely seen on the extended moors at a distance from arable land. The nest is placed on the ground, amongst grass or corn; it is formed of dry grass and other vegetable stalks, lined with a fine dry grass.—*Montagu.*

SKYROCKET, *s.* A kind of firework, which flies high, and burns as it flies.

SLAM, *v.* To win all the tricks in a hand at whist.

SLAVER. *s.* To be smeared with spittle; to emit spittle.

SLED, *s.* A carriage drawn without wheels, generally used upon the ice.

SLEDGE, *s.* A large heavy hammer; a carriage without wheels, or with very low wheels.

Sleek, *a.* Smooth, glossy; the state of a horse's or dog's skin when in condition.

Sleep, *s.* Repose, rest, suspension of the mental powers, slumber.

Sleep of Birds.—Like horses and some other quadrupeds, a great number of birds sleep standing; the perchers, (*Insessores*, Vigors,) for example, nsually sleep standing on one leg upon some tree, bush, or other elevation, with the head turned behind, and the bill thrust under the feathers on the back, or under the wing. Indeed, these appear to be the general habits of the whole race of birds, in regard to their mode of resting and sleep; for the duck and goose, although they do not perch, will frequently sleep standing on one leg upon the ground, with their heads turned round, and the bills under the wing. Poultry, although they invariably perch, if a perch can be obtained, do not, when sleeping, rest usually on one leg; but they sink down with their bodies upon the perch, having their legs compressed under them. The sky lark sleeps upon the ground with his legs also similarly compressed. It is probable also that all the tribes of birds, even the perchers, occasionally sink down with their bodies resting on the perch during their soundest sleep. What is very remarkable in the structure of their feet and legs is, that the greater the weight upon the muscles, the more firmly the claws grasp whatever they lay hold of; hence the cause that birds do not fall down in sleep, although most of their senses are dormant.

The motion of the branches of trees produced by the wind increases, doubtless, the disposition for sleep in many birds; this may be exemplified in the common fowl; for placing its bill under the wing, even in broad day light, and swaying it to and fro in the hand for a very short time, will produce sleep. Most of the tribe of birds sleep during the night; but there are many exceptions to this. Owls in particular are, during the night, much more active than in the day; their sight, similar to that of cats, appears to serve them best in the dark. Many of the duck tribe are not only wakeful, but feed during the night; so also do the nightjars. The nightingale, and a few other songbirds, are also wakeful while in song, during at least some portion of the night.—*Montagu.*

Slime, *s.* Viscous mire, any glutinous substance. Slimy, *a.* Overspread with slime; viscous, glutinous, as the skin of an eel.

Sling, *s.* A missile weapon made by a strap; a kind of hanging bandage.

Sling, *v.* To throw by a sling; to throw, to cast; to hang loosely by a string; the strap attached to a rifle, and used by the marksman to steady his aim when a rest is not be had.

Slip, *v.* To let loose; to throw off anything that holds one; to unloose a greyhound.

Slip, *s.* The act of slipping, a false step; mistake; a twig torn from the main stock; a leash or string in which a dog is held; an escape; a long narrow piece.

Slipknot, *s.* A bow knot, a knot easily untied.

Sloop, *s.* A small ship.

Slot, *s.* The track of a deer.

Slow, *a.* Not swift, not quick of motion; late, not happening in a short time; not ready, not quick; dull, inactive.

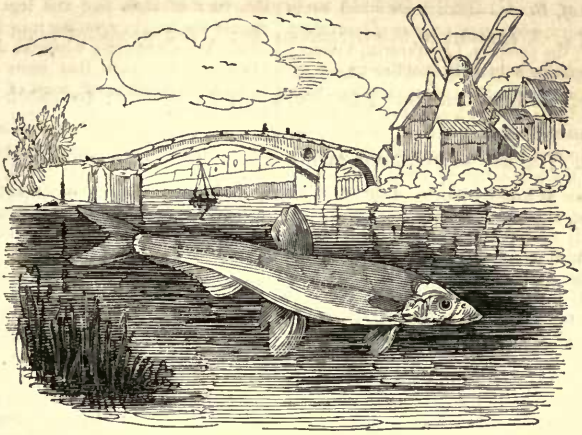
Slough, *s.* A deep miry place; the skin which a serpent casts off at his periodical renovation; the part that separates from a foul sore.

Slug, *s.* An idler, a drone; a kind of slow creeping snail; a cylindrical or oval piece of metal shot from a gun.

Smell, *v.* To perceive by the nose; to find out by mental sagacity.

Smell, *s.* Power of smelling; the sense of which the nose is the organ; scent.

SMELT, *s.* A small sea fish. It is of the salmon species, and in the spawning season ascends the rivers in great numbers.



The smelt derives its name from having, in the opinion of some, the scent of a violet, of others, that of a cucumber; they are met with in the seas that wash our coasts the whole year, and seldom go far from shore, except when they ascend the rivers, which they do with the tide; and in certain of which it is remarked, that they appear a long time before they spawn, being taken in abundance in the Thames and Dee in November and two succeeding months; in other rivers not until February, and in March and April they spawn, and are very prolific; after which they all return to the salt water, and are not seen in the rivers until the next season. It has been observed, that they never come into the Mersey so long as there is any snow water in its current; and that in the spring and beginning of summer they will run further up than in the decline of the year; they are also to be met with in the docks that are opened for the reception of ships. The smelt is of a very beautiful form and colour, the head is transparent, and the skin in general so thin that with a good microscope the circulation of its blood may be seen; the irides are silvery, the pupil of a full black, the under jaw is rather prominent, in the front of the upper are four large teeth, those in the sides of both are small; in the roof of the mouth are two rows, and on the tongue two others of large teeth; the colour of the back is whitish, with a cast of green, beneath which it is varied with blue, and then succeeds a beautiful gloss of a silvery hue; the scales are small and readily drop off; the tail is forked; the flesh is tender, and of a delicate taste. These fish vary greatly in size, the largest Mr. P. ever heard of was thirteen inches long, and weighed half a pound; they are often sold in the London streets under the name of dried sparlings, being split and dried, and are recommended by the gentlemen who take their gills of a morning, as adding to the wine a particular relish.

The smelt is to be angled for (when the tide runs up is preferable) with a paternoster line, having five or six hooks as many inches from each other, and baited differently. The best bait is very small fresh shrimps (not boiled), or the tail of a boiled one; next to these are gentles and red paste; also that made of boiled shrimps, fine white bread, and a little honey; cadis, blood-worms; and they will sometimes take a bit of their own species; some crumbs of bread steeped in water should be now and then thrown in to keep them together.

Walton mentions, that, many years since, in the month of August, such vast quantities of smelts came up the Thames, that women and children became anglers for them; and that in one day, between London bridge and Greenwich, not fewer than 2,000 persons were thus employed.

SMERLIN, *s.* A fish.

Smith, *s.* One who forges with his hammer; one who works in metals.

Smithy, *s.* The workshop of a smith.

Snaffle, *s.* A bridle which crosses the nose; a kind of bit for a bridle.

Snaffle, *v.* To bridle, to hold in bridle, to manage.

Snake, *s.* A serpent of the oviparous kind, distinguished from the viper. The snake's bite is harmless.

Snap, *v.* To break at once; to break short; to bite; to catch suddenly and unexpectedly.

Snap, *s.* The act of breaking with a quick motion; a quick eager bite; a catch. Snappish, *a.* Eager to bite; peevish; sharp in reply.

Snare, *s.* Anything set to catch an animal, a gin, a net; anything by which one is entrapped or entangled. The wire by which hares and rabbits are poached; horsehair loops to take small birds.

Snare, *v.* To entrap, to entangle.

Snarl, *v.* To growl, as an angry animal.

Snet, *s. obs.* The fat of a deer.

Snipe, *s.* A small fen fowl with a long bill.

The weight of this species is about four ounces; length near twelve inches; the bill three inches long, dusky; in some the base is lighter, flattish, and rough at the end; irides dusky; crown of the head black, with a longitudinal light rufous line down the middle; from the base of the upper mandible another line of the same colour passes on each side over the eyes; between the bill and eye is a dusky line; the throat white; cheeks, neck, and upper breast, mottled with black and light ferruginous; the back and scapulars are black, barred with ferruginous-brown, and striped with yellowish buff-colour, in longitudinal lines; the quills are black, the first edged with white; the secondaries tipped with the same; those next the body are, with their coverts, striated, and barred with light ferruginous; lower breast and belly white; vent brown; upper tail coverts brown, barred with black; the tail consists of fourteen black feathers, barred and spotted with dull orange-red towards the end, with a narrow bar of black near the tip, where it is pale rufous; legs

vary; in some dusky or lead-colour, others green.

This is a plentiful species in most parts of England; and is found in all situations, in high as well as low lands, depending much on the weather. In very wet times it resorts to the hills; at other times frequents marshes, where it can penetrate its bill into the earth after worms, which are its principal food.

Some few remain with us the whole year, and breed in the more extensive marshes and mountainous bogs. We have frequently taken the young before they could fly, in the north of England, and in Scotland. Near Penryn, in Cornwall, there is a marsh where several breed annually, and where we have taken their eggs, which are four in number, of an olivaceous colour, blotched and spotted with rufous-brown; some with dusky blotches at the larger end. The nest is made of the materials around it; coarse grass, and sometimes heath. It is placed on a stump or dry spot, near a plash or swampy place; the eggs like those of the lapwing, placed invariably with their ends inwards, being much pointed; their weight three drachms and a half.

In the breeding season, the snipe changes its note entirely from that it makes in the winter. The male will keep on wing for an hour together, mounting like a lark, uttering a shrill, piping noise; it then descends with great velocity, making a bleating sound, not unlike an old goat, which is repeated alternately round the spot possessed by the female, especially while she is sitting on her nest. This bird has been met with in almost every part of the world.

Great Snipe, (Scolopa Media).—Size between the woodcock and snipe; weight eight ounces; length sixteen inches; bill four inches long, and like that of the woodcock; crown of the head black, divided down the middle by a pale stripe; over and beneath each eye another of the same; the upper part of the body very like the common snipe; beneath white; the feathers edged with dusky black on the neck, breast, and sides; and those of the belly spotted with the same, but the middle of it is plain white; quills dusky; tail reddish, the two middle feathers plain, the others barred with black; legs black. He adds, "this is a rare species." A fine specimen of it was shot in Lancashire, now in the Leverian Museum, said also to have been met with in Kent.

* * *

There are a good many snipes in the vicinity of that place; the marshes, however, frequented by those birds, are not very extensive, and may easily be hunted in much less than a day; but if a person be well acquainted with the ground, better snipe shooting is hardly to be met with in any country. As a proof of this, I have bagged upwards of thirty brace of those birds in seven or eight hours. These were either the common or double snipe, as I was careless of wasting my powder and shot about the jack or half snipe.

The double or solitary snipe, I usually found singly, or at most in pairs. They were generally so fat as hardly to be able to fly; indeed, if flushed, their flight was usually very short, and they presently settled again. They were nearly twice as large as the common snipe, and from their heavy and steady flight they presented the easiest mark possible. They are considered to be most delicious eating; four couple was the greatest number of those birds that I ever killed in Sweden in any one day. They were by no means plentiful in the vicinity of Gottenburg.

* * *

The double snipe is a bird of passage, and among those which arrive the latest; in colour speckled grey, with a long bill. At the end of July, when the meadows are mowed, the shooting of these birds with the pointer commences, and continues till towards the end of September. They may also be shot during the spring; but I have observed this has diminished the autumn shooting. In the whole round of sporting, this affords one of the greatest pleasures. These birds are easy to shoot; and in some places, fifty or sixty, and considerably more, may be shot in a day, particularly in autumn, when they are so fat that they almost burst their skins. They are most delicious eating.

* * *

In the heather surrounding a small lake in the island of Hoy, in the Orkneys, I found in the month of August, in 1817, the nests of ten or twelve couple of snipes. I was grouse shooting and my dog continually pointed them, and as there were sometimes three young ones and two old ones in the nest, the scent was very powerful.

Snipes are usually fattest in frosty weather, which I believe is owing to this, that in such weather they haunt only warm springs, where worms are abundant, and they do not willingly quit those places, so that they have plenty of nourishment and rest, both circumstances favourable to fat. In wet open weather they are often obliged to make long flights, and their food is more distributed. The jack-snipe feeds upon smaller insects than the snipe, small white larvæ, such as are found in black bogs, are its favourite food, but I have generally found seeds in its stomach, once hempseed, and always gravel. I know not where the jack-snipe breeds, but I suspect far north. I never saw their nests or young ones in Germany, France, Hungary, Illyria, or the British Islands.

In 1828, in the drains about Labach, in Illyria, common snipes were seen in the middle

of July. The first double snipes appeared the first week in September, when likewise woodcocks were seen; the first jack-snipe seen, did not appear until three weeks later than the 29th of September. I was informed at Copenhagen, that the jack-snipe certainly breeds in Zealand, and I saw a nest with its eggs, said to be from the island of Sandholm, opposite Copenhagen, and I have no doubt that this bird and the double snipe sometimes make their nests in the marshes of Holstein and Hanover. An excellent sportsman and good observer informs me, that in the great royal decoy, or marsh preserve, near Hanover, he has had ocular proof of double snipes being raised from the nest there; but these birds require solitude and perfect quiet, and, as their food is peculiar, they demand a great extent of marshy meadow. Their stomach is the thinnest among birds of the scolopax tribe, and, as I have said before, their food seems to be entirely the larvæ of the tribuæ, or congenerous flies.

Snipe Shooting.—Snipes when plenty afford very excellent sport, it being allowed to be the pleasantest, on account of the quick succession of shots; this is also the best shooting for practice, seldom failing to make indifferent shots most excellent ones. There is no shooting that presents such a variety of shots, scarcely any two being alike.

These birds usually fly against the wind, therefore every snipe-shooter should walk down it, as by that means the bird, if he rises before him, will fly back, and coming round him, describe a kind of circle; or at least his flight, for a certain distance, will not lengthen the shot, allowing him a certain time to cover the bird and take good aim; for if he gets up before him, and should by chance go down the wind, or from him, it is then the most difficult shot. It will be proper, in this case, to let the bird get a little distance from him, as then he will fly steadier and the slightest grain will fetch him to the ground.

* * *

When shooting snipes in the vicinity of Gottenburg, one's sport mainly depends on the weather. If it blows hard from the westward, a strong current sets into the river from the North Sea; this impedes its course, and causes it to overflow its bounds, in which case many of the marshes become partially overflown, when the snipes, from finding little shelter, usually lie light, and are difficult to approach. If, on the countrary, the wind should be moderate, or from the eastward, and the water consequently low, those birds have abundance of cover, and it is easy therefore to get within range of them.

* * *

Pointers are made use of by many in shooting this species of birds, and, what is very singular, although these birds are so diminutive, in comparison with game which pointers are most accustomed to, yet they will stand equally staunch to them; even to the jack-snipe, which is the smallest of these birds. If you make use of a pointer it ought to be a very old staunch one, for two reasons; the first is, that this diversion not only spoils young ones, but slacks their mettle, as the points come so fast upon them, that if they become habituated to snipes, they will not look for other game, by reason of their getting a number of points without any exertion; secondly, a young pointer will be too quick for the snipe,—on the contrary, an old one would not be able to go out of a very slow pace, and, if under good command, will give the most satisfaction. When these birds are very plenty, the snipe-shooters never make use of a dog, as they always walk them up, which is found to answer best, and afford the most sport.

A pointer that is much used for grouse or partridge, should never be taken out snipe or pheasant shooting; for if he once gets accustomed to snipes, he will often baulk you on the moors in the grousing season; for as snipes are frequently met with at that time on them, if he points one, he may often give you a good walk and trouble, before you get to him, supposing it is game, and you are not a little mortified to find it only a snipe: and if accustomed to pheasants, he will be always puzzling about hedges, and not beat his ground as he ought to do. An old pointer may also be made use of for pheasants, as well as snipes.

The jack-snipe (*Vide* JUDCOCK) is esteemed the most difficult shot, although he seldom, on rising, makes any twistings or twinings, and will alight or pitch again, after being fired at, within a couple of hundred yards. Every sportsman that has been much accustomed to snipe-shooting, will allow, that a jack-snipe will suffer himself to be fired at twenty times in the same field, and will pitch each time so close to the shooter, that he frequently conceives that he has wounded him. They lie so close, that a staunch pointer might remain at his point until the moon changed, as this bird will not rise until forced to do so. A most curious circumstance which occurred respecting a jack-snipe that was sprung several times by a Mr. Molloy, formerly a quarter-master of the 64th regiment, while he was quartered at Geneva barracks, Ireland, is well worth relating: he regularly, after his duty was done, or if he could possibly obtain leave for a day, used to equip himself for shooting, and always sprung this jack-snipe, at which he fired and followed, and the bird used to pitch so close to him at times, that he was confident he had shot it, and used to run to take it up, when, to his great surprise, it would rise and fly a little farther; he actually acknowledged he fired, one day, eighteen times at this bird,

and after shooting at it for the whole season, he happened to be crossing the bog it lay in, when he put it up, and exclaiming, "there's my old friend," threw his stick at it, and killed it on the spot. Whenever, after, any of his brother officers found a jack-snipe, they were always sure to say, "there goes Quarter-master Molloy."

In Ireland, in the bottoms of the county of Limerick, about Charleville, these birds are in the greatest abundance, as it is not uncommon to hear of a person shooting twenty brace of them in the morning. The late Sir George Dunbar, of the 14th regiment of Light Dragoons, when quartered at Charleville, won a considerable wager by shooting forty-three brace between ten o'clock in the morning and four in the afternoon; and what appears still more extraordinary is, that although there are so many sportsmen about that place, who follow these birds, and others who net them, yet you find always enough of sport the day following; for there seem to be as many snipes, after two months' destruction, as there were at the beginning of the season. The compiler himself has shot twenty brace, frequently, in a day, in the county of Cork; and, in the county of Limerick, has fired so often, that he has been forced to wait for the barrel of the gun to cool, before he durst attempt to reload. —*Thornville — Daniel — Lloyd — Latham—Grieff.*

Snort, *v.* To blow through the nose, as a high-mettled horse.

Snoud, *s.* The finer part of the line to which, in sea-fishing, the hook is immediately attached.

Soap, *s.* A substance used in washing.

Soar, *v.* To fly aloft, to tower; to fly without visible action of the wings.

Soar, *s.* Towering flight; the flight of the eagle and falcon.

Soar Hawk, *s.* So termed from the time she leaves the eyrie until she mews her feathers.

Sociable, *s.* A kind of phaeton, with two seats facing each other, and a box for the driver.

Soil, *s.* Dirt, spot, foulness; land, country; dung, compost; cut grass given to cattle; *to take soil*, in hunting; to go into water.

Solder, *v.* To unite or fasten with any kind of metallic cement; to mend, to unite anything broken. Solder, *s.* Metallic cement.

Sole, *s.* The bottom of the foot; the bottom of the shoe; the part of any thing that touches the ground; a kind of sea fish. Soles will take a bait freely; but they are generally taken with a trawl net.

Solid, *a.* Not fluid; not hollow, compact, dense.

Soluble, *a.* Capable of dissolution or separation of parts.

Solund or Solan Goose, *s.* A fowl in bigness and feather very like a tame goose, but his bill longer. *Vide* Puffin.

Song, *s.* Anything modulated in the utterance; a ballad, a poem, lay, strain; poetry, poesy; notes of birds; an old song, a trifle.

Song of Birds.—As the song of birds is not allowed to be the effect of love, by an honourable author on the subject of singing birds (Daines Barrington), we shall endeavour to elucidate this matter from experiments on birds in their natural wild state; and also endeavour to prove that their notes are innate, contrary to that author's opinion. That confined birds will learn the song of others they are constantly kept with, there is no doubt; but then it is generally blended with that peculiar to the species. In the spring, the very great exertions of the male birds in their vociferous notes are certainly the calls to love; and the peculiar note of each is an unerring mark for each to discover its own species. If a confined bird had learned the song of another, without retaining any part of its natural notes, and was set at liberty, it is probable it would never find a mate of its own species; and even supposing it did, there is no reason to believe the young of that bird would

be destitute of its native notes; for if nestling birds have no innate notes peculiar to the species, and their song is only learned from the parent bird, how are we to account for the invariable note each species possesses, when it happens that two different species are bred up in the same bush, or in one very contiguous, or when hatched or fostered by a different species. * * *

Although there appears considerable force in these arguments of Montagu, I am disposed to be of opinion, that birds sing most frequently from joy and buoyancy of spirits, and not unfrequently in triumphant defiance of rivalry or attack. I have a red-breast at present, who will sing out whenever I snap my fingers at him; and the sedge-bird sings when a stone is thrown into the bush where he may be.

Syme's remarks upon the songs of birds, are worth quoting. The notes, he says, of soft-billed birds, are finely-toned, mellow, and plaintive; those of the hard-billed species are sprightly, cheerful, and rapid. This difference proceeds from the construction of the larynx; as a large pipe of an organ produces a deeper and more mellow-toned note than a small pipe, so the trachea of the nightingale, which is wider than that of the canary, sends forth a deeper and more mellow-toned note. Soft-billed birds, also, sing more from the lower part of the throat than the hard-billed-species. This, together with the greater width of the larynx of the nightingale and other soft-billed warblers, fully accounts for their soft, round, mellow notes, compared with the shrill, sharp, and clear notes of the canary and other hard-billed songsters. In a comprehensive sense, the complete song of birds includes all the notes they are capable of uttering; and, taken in this sense, it is analogous to the speech of man. It is the vehicle through which these little creatures communicate and convey to each other their mutual wishes and their wants. It may be divided into six distinct separate sounds or parts, each of which is very expressive, even to us, of the feelings which agitate the bird at the moment. To describe their song more fully, we shall divide it in the following manner:—

First—The call-note of the male in spring.

Second—The loud, clear, ardent, fierce notes of defiance.

Third—The soft, tender, full, melodious, love warble.

Fourth—The notes of fear or alarm, when danger approaches the nest.

Fifth—The note of alarm, or war-cry, when a bird of prey appears.

Sixth—The note the parent-birds utter to their brood, and the chirp or note of the young.

The note of the young may be again divided into two; that which they utter while in the nest, and the chirp after they have left it; for they are very distinct sounds or notes; to which may be added, a soft, murmuring kind of note, emitted by the male, while he is feeding the female in the nest; and also by her while she is receiving the food. The call-note; the warble of love; and the notes of defiance, or prelude to battle, seem only to be understood by birds of the same species, at least in a wild state. Perhaps, in a state of domestication, birds of different genera, if nearly allied, may partially comprehend these notes, as the canary bird does the notes of the siskin, the goldfinch, and the linnet.

* * *

All the notes comprised in the song of birds convey delight to the mind of a lover of nature; but the bird-fanciers only prize their love warble, and notes of defiance; these notes, and these only, he considers to be their song. The musical notes of birds, whether of love or war, are sweet, and really charming in themselves; but they perhaps pour on the mind a greater degree of pleasure than mere sound is capable of conveying—we mean the recollections of youthful days, of endearing incidents, or of scenes connected with country pleasure. We ourselves prefer the mellow, plaintive melody of the soft-billed species; but others give the palm to the cheerful warble of the hard-billed tribe; which of these two styles is the sweetest melody we cannot determine. Both warbles may be equally fine; and the preference, perhaps, may depend on taste and feeling. But it is allowed, by all who have an ear for music, or rather, we should say, who have an ear and love for simple natural melody, that the song or warble of birds is truly delightful; but all their musical notes cease as soon as the brood is hatched.—*Montagu—Syme—Rennie.*

SOPORIFIC, *a.* Causing sleep, opiate.

SOREL, *s.* A buck of the third year.

SOUP, *s.* Strong decoction of flesh for the table.

Hawker's recipe for a mountain soup is simple and excellent—*Probatum est.*—ED.

Three pounds of meat, a large carrot, two onions, and two turnips. (The Frenchman adds also a cabbage; here John Bull may please himself.) Put them into two quarts of water, to simmer away till reduced to three pints. Let him season the soup to the taste,

with pepper, salt, herbs, &c. He must then cut off square, a pound of the fattest part of the meat, and put it aside, letting the rest boil completely to pieces. After he has well skimmed off the fat, and strained the soup, let him put it by till wanted.

On your return, while seeing your dogs fed, which every sportsman ought to do, let the soup be put on the fire for twenty minutes, with some fresh vegetables, (if you like to have them,) and, for the last ten minutes, boil again the square piece of meat which was reserved. Another necessary part of the recipe also should be prescribed, lest the dish should fall into disrepute. To prevent the deputy cook from helping himself, and filling it up with water, let him have a partnership in the concern, and when he has occasion to quit the room, he should either lock the door, or leave one of your relay dogs for a sentry.

You will then have a good wholesome gravy-soup to begin with, and afterwards some tender meat, which, if eaten with mustard, a little raw parsley chopped fine, and a few anchovies, you will, it is presumed, find an excellent dish. A pot of anchovies might easily be carried in a portmanteau, being, of all the luxuries from an oil-shop, one of the most portable and most useful.—*Hawker.*

Sow, *s.* A female pig, the female of a boar; an oblong mass of lead; an insect, a millepede.

Spade, *s.* The instrument of digging; a suit of cards.

Spadille, *s.* The ace of spades at ombre and quadrille.

Spancounter, or Spanfarthing, *s. obs.* A play at which money is thrown within a span or mark.

Spaniel, *s.* A dog used for sport in the field, remarkable for sagacity and obedience.

Anatomical Character of Spaniels.—The head very moderately elongated; the parietal bones do not approach each other above the temples, but diverge and swell out so as to enlarge the forehead and the cerebral cavity. This group includes the most useful and intelligent dogs.

Var. E—Spaniel, *Can. fam. extrarius*, Linn. The name of the spaniel race is derived from its supposed original country, Spain.

The sub-varieties are—*a*, The smaller spaniel, with a small round head, the ears and tail covered with long hair; *b*, King Charles's spaniel, *Can. brevipilis*, Linn.; *c*, *La Pyrame*, Buff.; *d*, The Maltese, *Bichon*, Buff.; *e*, The lion dog, *Can. leoninus*, Linn.; *f*, the Calabrian dog; *g*, The hunting spaniel or cocker, which yields the setter, *Can. index*, Linn. Addenda—The Newfoundland dog; The Alpine spaniel.

Var. F—The water spaniel, *Canis aquaticus*, Linn.; *chien barbat*, Buff.

Sub-varieties—*a*, small water spaniel, *petit barbet*, Buff.; *chien griffon*, a dog between the water spaniel and the shepherd's dog.—*Blaine.*

SPAR, *v.* To fight like cocks with prelusive strokes; to box with gloves.

SPARK, *s.* A small particle of fire, or kindled matter; anything shining; anything vivid or active.

SPARROW (*Passer domesticus*, ALDROVAND), *s.* A small bird.

This well-known species weighs near seven drachms; length about six inches; the bill is dusky; irides hazel; the crown of the head ash-colour; round the eye, and between that and the bill, is black; behind the eyes, surrounding the back part of the head, bay; cheeks, white; chin and under part of the neck, black, mixed with grey; belly, dirty white; the coverts of the wings are chestnut and black mixed, with a whitish bar across them; the back a mixture of black and rufous; quills dusky, with rufous edges; tail dusky, edged with grey; legs brown. The bill of the female is lighter; behind the eye a line of white; the head and whole upper parts are brown, the under dirty white, dashed with ash-colour; no black on the chin or neck. In the country the sparrow exhibits a gloss and intermixture of colours rarely to be seen in those inhabiting large towns, which soon become of a dingy and almost uniform hue, from the accumulation of dust and smoke upon their plumage.

The sparrow is well known in every part of England; it inhabits the dwellings of the rich and the poor, taking possession of the humble thatched cottage in preference to the sumptuous palace. It is rarely seen far from the habitation of man, as it delights in the fruits of his labour; the highest cultivated parts producing the greatest quantity. It might be said of this bird, as of some species of water fowl, which remaining always within soundings, warn the mariner of his approach to land; so on the extensive and dreary mountains, not a sparrow is ever to be seen, and the sight of one bespeaks some habitation near. It makes a nest conformable to the place it chooses for incubation, whether in a hole of a wall, in thatch, or under the tiles of a house, or in a window swallow's nest, it must conform to the size of the place; but when the nest is made in a tree, it is of large size, and covered at top, composed of hay and straw, lined warmly with feathers and fragments of thread or worsted, bits of cloth, or any refuse material of that sort, found about houses.

This accommodation of the structure of the nest to the locality where it is built, is in no instance, with which we are acquainted, more conspicuous than in the proceedings of the house-sparrow. Dr. Darwin mentions, seemingly as an extraordinary circumstance, that "in the trees before Mr. Levet's house, at Litchfield, there are annually nests built by sparrows, a bird which usually builds under the tiles of houses or the thatch of barns;" but if he had been acquainted with the works of Bonnet, he would have learned that in Switzerland, at least, the sparrow "most usually (*pour l'ordinaire*) builds near the tops of trees," while its nestling under tiles is an accidental exception. In the vicinity of London also, we venture to say that three pair of sparrows build on trees to one pair that nestle in holes; and so commonly is this noticed, that the tree-sparrow is popularly supposed to be a different species from the house-sparrow. The tree-sparrow (*Passer montanus*) of Yorkshire is indeed a different species, which lays pale brown eggs without spots; but the London ones, which build either on trees or in holes, have not a shade of difference.

It is worthy of notice, that they always proportion the quantity of materials to the size of the nest hole, which is generally packed close, leaving only a sufficient cavity for hatching the eggs and rearing the young. I have one of these nests, for example, which could almost be hid in the hollow of the hand, and another, built about a yard from it, which would fill a hat. When the nest is built on a tree, however, it is always nearly of the same dimensions, about a foot in diameter each way. From the bird nestling occasionally in holes, it might be imagined that when it made choice of a tree, it would be on account of thus obtaining a canopy of thick boughs to form a roof; but, on the contrary, sparrows, for the most part, select a high, exposed branch, as if they were more anxious to be out of the reach of cats, than of cold winds. When sparrows build in the ivied wall of a house, as they often do, they do not consider the thick clustering of the leaves above the nest as a sufficiently warm coping; and in such cases usually, if not always, construct a dome of straw, though much more slight than in nests built on the exposed branches of trees.

From its anxiety to procure shelter, the sparrow indeed seizes upon any convenience it can find best adapted to its purpose, whether that be accidental or have been prepared by some other bird. One very cogent reason for this appears to be its looking forward prospectively to the winter, for sparrows occupy their nests at night throughout the year, and though they are hardy birds, they require a warm shelter during severe frosts.

I am not aware that any contrivance is resorted to in Britain, to entice birds to build in particular places, except in the case of the

house-sparrow. In the vicinity of London more particularly, pots of unglazed delft ware of a sub-oval shape, with a narrow hole for an entrance, are fixed upon the walls of houses, several feet below the eave, and the sparrows finding a domicile so suited to their habits, very soon took possession of every pot thus provided for them. But those who are so careful to accommodate the sparrows, do it not because they are fond of their neighbourhood or their yelping concerts, but to prevent their nestling under the eaves, where they dig out the mortar with their strong bills, when they do not find holes large enough for their accommodation. It probably never struck those wise persons, that by thus encouraging the sparrows to breed, they are promoting the increase of the race, and unless they multiply their sparrow pots yearly, they may be almost certain that the supernumeraries will resort to eaves nearest their birth-place. In Holland, square boxes are placed on the house-tops, to entice the stork (*Ardea ciconia*) to build; and for the same purpose it was customary in France, in Belon's time, to place wheels there, a practice said to be still followed in some parts of Germany.

The sparrow lays six eggs of a whitish colour, spotted with dusky brown or ash-grey, and varying much in the shades as well as the thickness of the spots; each weighs from forty-three to forty-eight grains. Accidental varieties occur, such as white, black, and yellowish.

Sparrow Shooting.—If, however, there are persons who still think the practice of shooting swallows to be of assistance in acquiring the art, we will venture to recommend another mode which is nearly similar, but, in our opinion, much better. This is, by putting small pieces of white paper round the necks of sparrows, or other small birds, by the means of a hole cut in the middle of the paper, then throwing a single bird into the air, the young shooter may deliberately take his aim, for by this device the flight of the bird is rendered less rapid and more regular, and at the same time presents a much better mark for practice, besides it affords an excellent diversion in seasons when game cannot be pursued, or in wet weather from underneath the shelter of a shed or a barn-door. Some of the first shots in the kingdom have been perfected by this mode. —*Montagu—Art of Shooting.*

Sparrowhawk (*Accipiter fringillarius,* Ray), *s.* The female of the musket-hawk.

The Sparrowhawk. (*Falconisus,* Linn.; *L'Epuvier,* Buff.)—The length of the male is twelve inches; that of the female fifteen. Its bill is blue, furnished with bristles at the base, which overhang the nostrils; the colour of the eye is bright orange; the head is flat at the top, and above each eye is a strong bony projection, which seems as if intended to secure it from external injury: from this projection a few scattered spots of white form a faint line running backward towards the neck: the top of the head and all the upper parts of the body are of a dusky brown colour; on the back part of the head there is a faint line of white; the scapulars are marked with two spots of white on each feather; the greater quill fea-

thers and the tail are dusky, with four bars of a darker hue on each; the inner edges of all the quills are marked with two or more large white spots; the tips of the tail feathers are white; the breast, belly, and under coverts of the wings and thighs are white, beautifully barred with brown; the throat is faintly streaked with brown; the legs and feet are yellow; claws black.

The above is the description of a female; the male differs both in size and colour; the upper part of his body is of a dark lead colour; and the bars on his breast are more numerous.

The female builds her nest in hollow trees, high rocks, or lofty ruins, sometimes in the old nest of a crow, and generally lays four or five eggs, spotted with reddish spots at the longer end.

The sparrow-hawk is very numerous in various parts of the world, from Russia to the Cape of Good Hope. It is a bold and spirited bird; but is obedient and docile, and can be easily trained to hunt partridges and quails; it makes great destruction among pigeons, young poultry, and small birds of all kinds, which it will attack and carry off in the most daring manner.—*Bewick.*

SPARROW-OWL, *s.* (*Noctua passerina*, SAVIGNY.)

The sparrow owl is a very rare species in England. In France it is said to frequent ruined edifices. It makes a nest in the holes of rocks and walls, and lays five or six eggs, spotted with yellowish and white. It is said to fly by day, and to give chace to small birds; but its principal food is mice. It is said to build in chimneys in Carniola; and Mr. Edwards mentions two having been taken in England by coming down chimneys. In 1808, one was shot by Mr. Comyns, in North Devon.—*Montagu.*

SPAVIN, *s.* This disease in horses is a bony excrescence, or crust as hard as a bone, that grows on the inside of the hough.

Bony spavin consists of a small bony enlargement on the inside of the hock, which often is not very observable. It occasions, however, a peculiar kind of lameness, which cannot well be mistaken, that is, a quick catching up of the leg, especially in trotting. This lameness is of course in various degrees, and sometimes scarcely observable except on first starting, and sometimes in confirmed and bad spavins; the lameness diminishes, and sometimes appears to go off by exercise, but after resting for some time the horse becomes very stiff and lame. The only remedy for this complaint is firing, and blistering immediately after. The horse should then be turned into a box for a short time, and afterwards to grass; in about a month he may be put to work. I have been informed that introducing a seton over the diseased part of the hock is now practised at the Veterinary College, in preference to firing. I have never tried this remedy, being satisfied that firing is the best, and indeed the only remedy where the disease is curable. The hot iron should be carried through the skin immediately over, and a little way into, the bony excrescence.

Bog spavin and *thorough pin* is a swelling on the inside of the hock, rather towards the fore part; the large vein which is so conspicuous on the inside of the leg passing over it. It depends either upon a distension, or rupture of the membranes which form the synovial cavity, or bursa mucosa, through which the great flexor tendon passes. The swelling is soft and yielding to the pressure of the finger, but rises again as soon as the pressure is removed. Sometimes, however, there is a swelling on the outside of the hock also, and in that case the fluid or synovia which the swelling contains, may be forced from one to the other. It is generally produced by hard work, or violent exertion for a short period, generally in breaking in a colt and putting him upon his haunches, as it is termed, at too early an age. It seldom occasions lameness, unless considerable, and then makes a horse go very stiff, especially after working much. The only remedy is firing, and sufficient rest; and when it is so considerable as to cause any degree of stiffness, it is advisable to have recourse to this operation. It often exists however in a slight degree, and without occasioning any inconvenience, and then it is better to leave it alone.—*White.*

SPAWN, *s.* The eggs of fish or of frogs; any product or offspring.

SPAWN, *v.* To produce as fishes do eggs; to generate, to bring forth.

SPAWNER, *s.* The female fish.

SPAY, *v.* To castrate female animals.

Spaying is performed by making an opening in the flank on one side, when the ovaria, being enlarged by pregnancy, are readily distinguishable, and may be drawn out and cut off, first one and then the other; securing the ends by a ligature lightly applied to each sur-

face, but leaving the threads without the wound, which is to be closed by stitches and bandaging. Farriers often apply no ligature, but content themselves with simply sewing up the wound, and no ill consequence seems to ensue. Bitches, after they have been spayed, become fat, bloated, and spiritless, and commonly prove short-lived.—*Blaine.*

Spear, *s.* A long weapon with a sharp point, used in thrusting or throwing; a lance; a lance generally with prongs to kill fish.

Spear, *v.* To kill or pierce with a spear.

Species, *s.* A sort, a subdivision of a general term; class of nature, single order of beings.

Specific, *s.* A specific medicine.

Speed, *s.* Quickness, celerity, haste, hurry, despatch; the course or pace of a horse.

Speed of the Horse.—Common report says that Flying Childers could run a mile in a minute, but there is no authentic record of this. He ran over the Round Course of Newmarket (three miles, six furlongs, and ninety-three yards) in six minutes and forty seconds; and the Beacon Course (four miles, one furlong, and one hundred and thirty-eight yards), in seven minutes and thirty seconds. In 1772, a mile was run by Firetail, in one minute and four seconds. In October 1741, at the Curragh meeting in Ireland, Mr. Wilde engaged to ride 127 miles in nine hours. He performed it in six hours and twenty-one minutes. He employed ten horses, and allowing for mounting and dismounting, and a moment for refreshment, he rode for six hours at the rate of twenty miles an hour. Mr. Thornhill, in 1745, exceeded this, for he rode from Stilton to London and back, and again to Stilton, being 213 miles, in eleven hours and thirty-four minutes, which is, after allowing the least possible time for changing horses, twenty miles an hour for eleven hours, and on the turnpike road and uneven ground. Mr. Shaftoe, in 1762, with ten horses, and five of them ridden twice, accomplished fifty miles and a quarter in one hour and forty-nine minutes. In 1763, Mr. Shaftoe won a more extraordinary match. He was to procure a person to ride one hundred miles a day, on any one horse each day, for twenty-nine days together, and to have any number of horses not exceeding twenty-nine: he accomplished it on fourteen horses, and one day he rode 160 miles, on account of the tiring of his first horse. Mr. Hull's Quibbler, however, afforded the most extraordinary instance on record of the stoutness as well as speed of the race-horse. In December, 1786, he ran twenty-three miles round the flat at Newmarket, in fifty-seven minutes and ten seconds.

Speed is sportingly applicable to horse, hound, or greyhound. There are two modes of trial for speed, according to the present reformed mode of English racing; the one is to run a mile, which is termed running for speed; the other, of going off at score, and absolutely racing the whole four miles, which is called running for speed and bottom. Flying Childers, whose speed was almost proverbial, went one third of a mile in twenty seconds. Firetail and Pumpkin ran a mile in a few seconds more than a minute and a half. Childers ran the distance of four miles in six minutes and forty-eight seconds, carrying nine stone, two pounds; he made a leap of thirty feet upon level ground; and he covered a space of twenty-five feet at every stroke when racing. It was formerly known that any horse who could run four miles in eight minutes, would prove a winner of plates: this is, however, very materially refined, by judicious crosses in blood, or improvements in training; as Bay Malton ran four miles over York in seven minutes, forty-three seconds and a half. Eclipse ran the same distance over York in eight minutes, with twelve stone, though going only at his rate, without any inducement to speed.—*Sporting Directory.*

Speediness, *s.* The quality of being speedy. Speedy, *a.* Quick, swift, fast.

Spelter, *s.* A kind of semi-metal.

Sperm, *s.* Seed, that by which the species is continued.

Spermaceti, *s.* A species of whale; an oily substance found in the head of the Physeter Macrocephalus.

Spice, *s.* A vegetable production, fragrant to the smell and pungent to the palate; an aromatic substance used in sauces.

Spike, *s.* An ear of corn; a long nail of iron or wood, a long rod of iron sharpened; a smaller species of lavender.

Spillet, *s.* A long line used for sea-fishing.

Did a man wish to moralise upon the unrealities of human expectations, let him hang over a spillet, and be interested in its success. Conceive an eternity of line, with a thousand hooks at given distances; as every snoud is placed a fathom apart, a person less conversant with figures than Joe Hume, may guess the total. This endless continuity of hemp must be carefully taken up. Do it slowly, and the thing is worse than a penance to Lough Dergh; and if you attempt rapidity, the odds are, that the back-line breaks, and a full hour will scarcely remedy the mischief.

It would puzzle a philosopher to determine the state of affairs in ten fathom of water; and if you shoot in foul ground, you will probably lose the spillet, or, with a world of labour, disentangle a moiety from rocks and sea-weed. Should it, however, have escaped those casualties, after a two hours' probation, while you listen to a drimindhu from the skipper, and the exact state of the herring-market from the crew, you proceed to raise it. Up it comes—that vibratory motion announces that a fish is fast upon the snoud; conjecture is busily at work, and there is a difference of opinion, whether 'the deceived one' be a codling or red gurnet. It appears—a worthless, rascally, dog-fish! A succession of line comes in—star-fish, and, "few and far between," some solitary plaices and flounders—at last a victim—heavy and unresisting. An indistinct glance of a dark object, broad as a tea-tray, brings the assistant spilleteer, gaff in hand, to the quarter. Alas! the turbot in expectation, turns out to be a ray! Often have I shot a spillet under favourable circumstances, and in approved ground, and lost time, hooks, and snouds, and my whole reward was a boat-load of skates and dog-fish.—*Wild Sports.*

Spinal, *a.* Belonging to the back bone.

Spine, *s.* The back bone.

Spine of Birds.—The back-bone of birds, unlike that of some other animals, is immoveable, though they have the power of bending the neck.—*Montagu.*

Spinous, *a.* Thorny, full of thorns.

Spiracle, *s.* A breathing hole, a vent, a small aperture, a pore.

Spirit, *s.* Breath, wind in motion; ardour; courage; that which gives vigour or cheerfulness to the mind; an inflammable liquor raised by distillation.

Spirited, *a.* Lively, full of fire.

Spiritless, *a.* Low, deprived of vigour, depressed.

Spitter, *s. obs.* A young deer.

Splayfooted, *a.* Having the foot turned inward.

Spleen, *s.* The milt, one of the viscera; anger, spite, ill-humour.

Splent, *s.* Splent is a callous hard substance, or an insensible swelling, which breeds on or adheres to the shank-bone, and when it grows big spoils the shape of the leg.

A horse often becomes lame when throwing out a splent; but that state of the bone which causes the lameness seldom continues long; nor does it ever produce permanent lameness. If any remedy is applied, a blister is always sufficiently strong. A new method of treating splents has been lately introduced; that is, passing a seton under the skin and immediately over the splent. It is said to be an improvement. I once tried it in a case of old bone spavin, but it did no good; nor did firing, which was tried soon after, though the hot iron was passed through the skin, and into the bony excrescence. The old method of rubbing or bruising a splent, puncturing it, and rubbing in some blistering preparation, will

often produce a considerable swelling of the whole limb, and do a great deal of mischief. Lameness from a splent may sometimes be removed by placing a pledget of old linen, wet with goulard or saturnine lotion on it, and confining it with a bandage kept constantly wet. I have seen a good effect from diluted vinegar also.

SATURNINE LOTION.

Superacetate of lead .	1 oz.
Vinegar	4 oz.
Water	1 pint. Mix.

—*White.*

SPLICE, *v.* To join the two ends of a rope or line without a knot.

SPLINT, *s.* A thin piece of wood used by surgeons to hold the bone newly set.

SPONGE, *s.* A soft porous substance remarkable for sucking up water.

SPOONBILL (*Platalea leucorodia*, LINN.), *s.*

Weight about three pounds and a half; length two feet eight inches; the bill is near seven inches long, and three quarters of an inch broad in the narrowest part; two inches towards the points in the largest part of the spoon; colour black, sometimes brown, with an orange-coloured spot near the tip of the upper mandible; it is also crossed with several indentations and dotted protuberances; the irides in some grey, others reddish; the lore, and round the eyes and throat, the skin is bare and black. The whole plumage is white; sometimes the quills are tipped with black; the legs are black, six inches long; thighs bare about half way; toes connected by a small web, extending as far as the second joint of the outer, and first joint of the inner toe.

The spoonbill is rarely met with in England. Mr. Pennant mentions that a flock of these birds migrated into the marshes near Yarmouth, in Norfolk, in April, 1774. We have also been assured it is sometimes seen on the coast of Devonshire in the winter.—*Montagu.*

SPORT, *s.* Play, diversion; diversion of the field, as of fowling, hunting, fishing.

SPORT, *v.* To play, to game; to trifle, to enjoy field amusements.

SPORTSMAN, *s.* One who pursues the recreation of the field.

SPOT, *s.* A blot, a mark made by discoloration; a taint; a disgrace.

SPRAIN, *v.* To stretch the ligaments of a joint without dislocating the bone.

SPRAIN, *s.* Extension of ligaments without dislocation of the joint.

SPRAT, *s.* A small sea fish.

SPRING, *v.* To arise out of the ground; to grow, to thrive; to bound, to leap; to fly with elastic power; to rise from a covert; to issue from a fountain; to shoot; to start; to rouse game; to discharge a mine.

SPRING, *s.* The season in which plants spring and vegetate; an elastic body, which, when distorted, has the power of restoring itself; elastic force; any active power; a leap, a violent effort; a fountain. *Mainspring*, the principal spring in a gun-lock.

If the *mainspring* be too strong, in proportion to that of the hammer, the cock is often broken for want of resistance, and if the hammer or feather spring be too stiff, or should shut down with too much force, it becomes difficult to throw it, even with a strong mainspring. Here, till very lately, most of the gunmakers were in the dark; as nothing was more admired in a lock, than the hammer shutting down with great velocity. This, not only for the reason already mentioned, is a sad fault, but the hammer by thus coming down escapes, in a certain degree, from the influence of the spring, and, consequently, loses its pressure on the pan; by which the priming is not so closely covered, and the hammer is apt

to re-act instead of obeying the mainspring. In a word let your hammer shut down dull and fly back smart. The mainspring, to be well regulated, should at first pull up hard, and then draw progressively easier: because it requires an accession of force after it has recovered the first sudden escape from the scear-spring, otherwise it will go slow with a flint, and be liable either to cause a snap, or allow the cock to be blown back with a detonater.—*Hawker.*

Springe, *s.* A gin, a noose which catches by a spring or jerk.

Springer, *s.* One who springs or rouses game.

Springer or Springing Spaniel (*Canis extrarius*, Linn.), *s.*

There are two different dogs which usually pass under this denomination; one being considerably larger than the other, and known by the name of the springing spaniel; it is applicable to every kind of game in any country.

The springer is supposed to have originated in Great Britain, although it is now widely diffused over every quarter of the globe. He is much and eagerly sought after in the wild sports of the East.

The true English-bred springing spaniel differs but little in figure from the setter, except in size; their chief difference consists in the former having a larger head than the latter in proportion to the bulk of his body; they vary also in a small degree in point of colour, from red, yellow, or liver colour and white, which seems to be the invariable standard of the breed. They are nearly two-fifths less in height and strength than the setter, their form being more delicate, their ears longer, very soft and pliable, covered with a coat of long waving and silky hair; the nose is red or black, the latter being the surest mark of high breeding; the tail is bushy and pendulous, and is always in motion when employed in pursuit of game.

Differently from other dogs used in shooting, both the springer and the cocker give tongue the moment they either smell or see game; and this gives intimation to the sportsmen, who generally station themselves on the skirts of the wood or covert to which woodcocks, snipes, and pheasants are known to fly when started.

Both this dog and the cocker are frequently used as finders in greyhound-coursing, and are no less eager to start a hare, which they pursue with as much ardour as they do winged game.

From the time the springer is thrown off in the field, he gives evident proofs of the pleasure he experiences in being thus employed, by the perpetual motion of his tail, which is termed feathering amongst sportsmen; and upon the increasing vibration of which the experienced fowler well knows that he is getting nearer to the object of attraction.

The nearer he approaches the game, the more energetic the dog becomes in his endeavours to succeed; tremulous whispers escape him, as a symptom of doubt; but the moment this doubt is dispelled, and the game is found, his clamorous raptures break forth in full

force. He expresses his gratification by loud and quick barking, which may be relied on as a proof that he has not sought in vain; leaving the happy owner exultingly to boast, that "he is in possession of at least one faithful domestic, who never tells a lie."—*Brown.*

Springhalt, *s.* A lameness by which the horse twitches up his legs.

Spring Wagtail (*Budytes flava*, Cuvier), *s.*

There appears no doubt but many authors have confounded this species with the grey wagtail, which we have remarked more fully in the history of that bird.

The male of this species, it is said, possesses a few black spots on the throat, but such a mark we have never observed in more than a hundred specimens. It must therefore be rare, if not a mistake, in describing the grey wagtail for this. If no other mark of distinction were to be found but the length and straitness of the hind claw in this, it would be sufficient to know it from the grey wagtail, which is very short and crooked. The tail of this bird is also an inch shorter, and has only two feathers on each side, partly white. The under parts of the male are of a much fuller yellow, and the upper parts never possess any of the cinereous colour.

The spring wagtail visits us about the time the other departs, and migrates again in September. It frequents arable land, especially in the more champaign parts; sometimes uncultivated ground interspersed with furze; it is also partial to bean fields; in all such places it breeds, and does not seem to regard water so much as either of the other species. It is said to be found in Russia and Siberia in summer, and to continue in France the whole year.—*Montagu.*

Sprout, *s.* A shoot of a vegetable; a branch of a deer's horn.

Spur, *s.* A sharp point fixed on the rider's heel; incitement, a stimulus; the sharp points on the legs of a cock; anything standing out.

Spur, *v.* To prick with the spur; to incite; to urge forward.

Spurgalled, *a.* Hurt with the spur.

Spurious, *a.* Not genuine, counterfeit; adulterine; not legitimate, bastard.

Spurling, *s.* A small sea fish.

Spurrier, *s.* One who makes spurs.

Spurry, *s.* A plant.

Squab, *a.* Unfeathered, newly hatched; fat, thick and stout; awkwardly bulky. *obs.*

Squamous, *a.* Scaly, covered with scales.

Square, *a.* Cornered, having right angles; forming a right angle.

Square, *s.* A figure with right angles and equal sides.

Squat, *v.* To sit cowering, to sit close to the ground.

Squeak, *v.* To cry with a shrill acute tone.

Squeak, *s.* A shrill quick cry.

Squib, *s.* A small pipe of paper filled with wildfire.

Squill, *s.* A plant; a fish; an insect.

Squirrel, *s.* A small animal that lives in woods, leaping from tree to tree.

Within the memory of some of the old persons residing in Richmond Park, squirrels were in such vast numbers, that parties of fifty or sixty persons have come from the metropolis and its neighbourhood, for the purpose of killing them. They were furnished with short sticks, with lead at one end, with which they knocked the animals down. These squirrel hunts occasioned many fights with the keepers, in one of which a keeper, of the name of Bishop, was nearly killed. The squirrels were in consequence destroyed, and it is now but seldom that one is seen.

* * *

Cat and Squirrels.—A boy has taken three little young squirrels in their nest, or drey as it is called in these parts. These small creatures he put under the care of a cat who had lately lost her kittens, and finds that she nurses and suckles them with the same assiduity and affection as if they were her own offspring. This circumstance corroborates my suspicion, that the mention of exposed and deserted children being nurtured by female breasts of prey who had lost their young, may not be so improbable an incident as many have supposed; and therefore may be a justification of those authors who have gravely mentioned what some have deemed to be a wild and improbable story.

So many persons went to see the little squirrels suckled by a cat, that the foster mother became jealous of her charge, and in pain for their safety; and therefore hid them over the ceiling, where one died. This circumstance shows her affection for these fondlings, and that she supposes the squirrels to be her own young. Thus hens, when they have hatched ducklings, are equally attached to them as if they were their own chickens.

* * *

The squirrel's nest is not only called a drey in Hampshire, but also in other counties; in Suffolk it is called a bay. The word "drey," though now provincial, I have met with in some of our old writers.

In the north of Hampshire a great portion of the squirrels have white tails. None of this variety, as far as I can learn, reach the London Market. I was much surprised at hearing from a man who kept a bird and cage shop in London, that not less than twenty thousand squirrels are annually sold there for the *menus plaisirs* of cockneys, part of which come from France, but the greater number are brought in by labourers to Newgate and Leadenhall markets, where any morning during the season four or five hundred might be bought. He said that he himself sold annually about seven hundred: and, he added, that about once in seven years the breed of squirrels entirely fails, but that in other seasons they are equally prolific. The subject was introduced by his answering to a woman who came in to buy a squirrel, that he had not had one that season, but before that time in the last season he had sold five hundred. It appears that the mere manufacture of squirrel cages for Londoners is no small concern.—*Mitford—White.*

STABLE, *a.* Fixed, steady.

STABLE, *s.* A house for beasts. *Vide* APPENDIX.

STACK, *s.* A large quantity of hay, corn, or wood.

STAG, *s.* The male red deer; the male of the hind.

The stag or hart, whose female is called the hind, and the young a calf, differs in size and in horns from a fallow deer. He is much larger, and his horns round, whereas, in the fal-

low species, they are broad and palmated. By these the animal's age is ascertained. During the first year the stag has no horns, but a horny excrescence, which is short and rough, and covered with a thin hairy skin, the next year the horns are single and straight, in the third they have two antlers, three the fourth, four the fifth, and five the sixth year, but this number is not always certain, for sometimes there are more, and often, less. After the sixth year the antlers do not always increase, and although in number they may amount six or seven on each side, yet the animal's age is then estimated rather from the size of the antlers, and the thickness of the branch which sustains them, than from their variety. These horns, large as they seem, are, notwithstanding, shed every year, and new ones assume their place. The old horns are of a firm solid texture, and are extensively employed in making handles for knives and other instruments. But, while young, nothing can be more soft or tender, and the animal, as if conscious of his own imbecility, at those times, instantly upon shedding his former horns, retires from the rest of his species, and hides himself in solitudes and thickets, never venturing out to pasture except by night. During this time, which most usually happens in the spring, the new horns are very tender, and have a quick sensibility of any external impression. When the old horn has fallen off, the new one does not begin to appear immediately, but the bones of the skull are seen covered only with a transparent periosteum or skin, which covers the bones of all animals. After a short time, however, the skin begins to swell, and to form a sort of tumour, which contains a great deal of blood, and then it is covered with a downy substance, that to the touch resembles velvet, and which appears of nearly the same colour with the rest of the animal's hair. This tumour daily increases from the point, like the graft of a tree, and, rising by degrees from the head, shoots out the antlers from either side, so that in a short time, in proportion as the animal is in condition, the entire horns are completed, but it should be observed, that the substance of which the horns are composed, begins to harden at the bottom, while the upper part remains soft and still continues growing; whence it appears that the horns of deer grow differently from those of sheep or cows, which latter always are seen to increase from the bottom. When, however, the horns have completed their full growth, the extremities then acquire solidity. The velvet-like covering, with its blood-vessels, dries up, and the former then begins to fall, and this the animal hastens by rubbing its antlers against the trees of the forest. In this manner the whole external surface being stripped off by degrees, the horns acquire their complete hardness, expansion, and beauty. It is also said that some hinds have horns.

It would be a vain task to inquire into the cause of the annual production of these horns; it is sufficient to observe, that if a stag be emasculated when the horns are fallen off, they will never grow again; and, on the contrary, if the same operation is performed when they are on, they will never fall off. If only one side is emasculated, he will want the horn on that side.

The old stags usually shed their horns first, which generally happens towards the latter end of February or the beginning of March.

Such as are between five and six years old shed their horns about the middle or latter end of March; those still younger in the month of April; and the youngest of all not till the middle or latter end of May.

They generally shed them in pools of water, whither they retire from the heat, and this has given rise to the opinion of their always hiding their horns. These rules, though true in general, are yet subject to many variations, and it is well known that a severe winter retards the shedding of the horns. A short time after they have gained their horns, they begin to feel the impression of the rut.

The old ones are the most forward, and about the end of August or beginning of September, they quit their thickets and return to the mountain or plain in order to seek the hind, to whom they call with a loud tremulous note. At this time their neck is swollen—they appear bold and ferocious—fly from country to country—strike with their horns against the trees and other obstacles—and continue restless and fierce until they have found the female, who at first flies from them, but is at last overtaken.

When two stags contend for the same female, however timorous they may appear at other times, they then seem agitated with an uncommon degree of ardour; they paw up the earth, and menace their opponent with their horns, bellowing with all their force, and striking in a desperate manner against each other, seeming determined upon death or victory. This combat continues till one of them is defeated or flies, and it oftentimes happens that the victor is obliged to fight several of these battles before he becomes the undisturbed master of the field. The old ones are generally the conquerors upon these occasions, as they have more strength and greater courage, and they are preferred by the hind to the younger, the latter being more feeble and less ardent.

In this manner the stag continues to range from one to the other for three weeks, the time the rut continues, during which he scarcely eats, sleeps, or rests, but continues to pursue, to combat, and enjoy. At the end of

this period of madness, for such in this animal it seems to be, the creature that was before fat, sleek, and glossy, becomes lean, feeble, and timid. He then retires from the herd to seek replenishment and repose.

The stag or red deer is common in Europe, Barbary, the north of Asia, and North America; it abounds in the southern parts of Siberia, where it grows to an immense size, but is now extirpated in Russia. It lives in herds, and there is generally one male which is supreme in each herd. The colour of the stag is generally a reddish brown, with some black and white about the face, and a black line down the hinder part of the neck between the shoulders, and the belly white. Sometimes their colour is a pale yellow brown, sometimes a blackish brown, and lastly, instances occasionally occur of stags being found entirely white.

The stag possesses a fine eye, an acute smell, and excellent ear, like that of the cat and the owl; the eye of the stag contracts in the light, and dilates in the dark, but with this difference, that the contraction and dilatation are horizontal, while in the first mentioned animals they are vertical.

When deer are thirsty, they plunge their noses, like some horses, very deep under water while in the act of drinking, and continue them in that situation for a considerable time.

The number of teeth of the various species of deer and the antelope tribe, is generally thirty-two, namely, eight cutting teeth in the lower jaw, six molar teeth on each side of these, and six molar teeth on each side in the upper jaw; but there are frequent exceptions to this rule.

The cry of the hind or female is not so loud as that of the male, and is never excited but by apprehension for herself or her young. It need scarcely be mentioned that she has no horns, or that she is more feeble or unfit for hunting than the male. When once she has conceived she separates from the males, and then they both herd apart. The time of gestation continues eight months and a few days, and they seldom produce more than one at a birth. Their usual season for bringing forth is about the month of May, or the beginning of June. They take the greatest care to secrete their young in the most obscure thickets, nor is the caution without reason, as many creatures are their formidable enemies. The eagle, the falcon, the wolf, the dog, and all the rapacious family of the cat kind, are continually seeking to discover her retreat. But what is more unnatural still, the stag himself is a professed enemy, and she is obliged to use all her arts to conceal her young from him, as from the most dangerous of her pursuers. At this season, therefore, the courage of the male seems transferred to the female; she defends her young against her less formidable opponents by force, and, when pursued by the hunter, she offers herself to mislead him from the principal object of his concern. She flies before the hounds for half the day, and then returns to her offspring, whose life she has thus preserved at the hazard of her own.

Those persons who are fond of the pastime of hunting have their peculiar terms for the different objects of their pursuit. Thus the stag is called, the first year, a *calf* or *hind calf*, the second a *knobber*, the third a *brock*, the fourth a *staggard*, the fifth a *stag*, the sixth a *hart*. The female is called, the first year, a *calf*, the second a *hearse*, the third a *hind*.

In Britain the stag is become less common than formerly, its excessive viciousness during the rutting season inducing most people to dispense with this species, and rear the fallow deer, which is of a more placid nature, in its stead. Some attempts have, indeed, been made to render stags domestic, by treating them with the same gentleness as the Laplanders do their rein-deer; and it appears, in the Isle of France, where the Portuguese had introduced the European breed, they had so far succeeded, by degrees, as to render them quite domestic, many of the inhabitants keeping large flocks of them; but when the French took possession of that island, they destroyed most of these domesticated stags. Valmont de Bromere asserts that he saw in Germany, a set, or attelage, consisting of six stags, that were perfectly obedient to the curb and to the whip; and in the magnificent stables of Chantilly, in the year 1770, there were two stags that were occasionally harnessed to a small chariot, in which they drew two persons.

Stags are still found wild in the Highlands of Scotland, in herds of four or five hundred together, ranging at full liberty over the vast hills of the north, and some of them grow to a great size: Pennant says, upon the authority of Mr. Farquharson, that one of these wild stags weighed three hundred and fourteen pounds, exclusive of the entrails, head, and skin. Formerly the great Highland chieftains used to hunt with all the magnificence of eastern monarchs, assembling four or five thousand of their clan, who drove the deer into the toils, or to the station their lairds had placed themselves in. But as the chace was frequently used as a pretence for collecting their vassals for rebellious purposes, an act was passed prohibiting any assembly of this kind.

Stags are likewise met with on the moors that border on Cornwall and Devonshire, and Ireland, on the mountains of Kerry, where they add greatly to the magnificence of the romantic scenery of the lakes of Killarney.

* * *

Stags are mostly kept in parks, with fallow deer. Dr. Johnson describes them as not exceeding the common deer in size, and that their flesh is of equal flavour. From a stag that had been committing depredations on the farmers' corn during a whole summer, and which was accidentally hunted and killed, after a long run, a haunch weighing forty-six pounds, was allowed by very competent judges to be the highest flavoured and fattest venison they had ever tasted. The stag's age is partly known by the horns, which he begins to shed about the end of February, and the new horns are complete and polished in July or August: at six years, the antlers amount to six or seven on each side; their number is uncertain, nor can the years be precisely ascertained beyond that period, as the new horns come like those last shed. The eye of the stag is peculiarly beautiful, soft, and sparkling, and is, for these attributes, frequently alluded to in Eastern poetry; he hears quickly, and his sense of smelling is highly perfect; his powers of leaping are often astonishingly exerted during the chase, and in the New Forest is a celebrated spot called the Deer Leap, where a stag was once shot, and in the agony of death, collecting his strength, gave a bound which so surprised those that saw it, that it is commemorated by two posts, fixed at the extremity of the leap: the space between them is something more than eighteen yards. The stag's rutting season is in August, and continues about three weeks, when he becomes a dangerous animal: he then frequents rivers or pools of water, to cool his ardour; he swims with great power and facility, and to this element he always retreats, when hard pressed by the hounds. The hind, at the expiration of eight months and a few days, produces seldom more than one young, which she resolutely protects from every enemy, and carefully conceals from the stag, one of the worst. During the whole summer the fawn never quits the dam; and in winter the stags and hinds of all ages keep together in herds, which are more or less numerous, according to the mildness or rigour of the season. They separate in the spring; the hinds retire to bring forth, while none but the young ones remain together. Stags are gregarious, delight to graze in company, and are separated but by danger or necessity.

* * *

While traversing a low range of moors, an incident occurred which, at this season, was unaccountable. A red-and-white setter pointed at the top of a little glen. The heathy banks on both sides of a mountain rivulet undulated gently from the stream, and caused a dipping of the surface; the ground seemed a favourable haunt for grouse, and our dogs were beating it with care. Observing the setter drop, his companions backed, and remained steady, when suddenly Hero rose from his couchant attitude, and next moment a wild deer of enormous size and splendid beauty crossed before the dog and sprang the birds he had been pointing. The apparition of the animal, so little expected, and so singularly and closely introduced to our view, occasioned a sensation I had never hitherto experienced. I rushed up the bank; unembarrassed by our presence, the noble deer swept past us in a light and graceful canter, at the short distance of some seventy or eighty yards. I might have fired at and annoyed him —but on a creature so powerful small shot could have produced little effect, and none but a cockney, under such circumstances, would waste a charge. To teaze without a chance of bringing down the gallant beast, would have been a species of useless mischief, meriting a full month upon the tread-mill. I gazed after him as he gradually increased his distance; his antlers were expanded as fully as my arms would extend; his height was magnificent, and compared with fallow-deer he seemed a giant to a dwarf. The sun beamed upon his deep bay side, as he continued describing a circular course over the flat surface of the moor, till reaching a rocky opening leading to the upper hills, he plunged into the ravine, and we lost sight of him.

What could have driven the red deer so low upon the heath was marvellous. Excepting when disturbed by a solitary hunter, or a herdsman in pursuit of errant cattle, or driven from the summit of the hills by snow and storm, those deer are rarely seen below the Alpine heights they inhabit. But the leisure pace of the beautiful animal we saw to-day, proved that he had not been alarmed in his lair, and led one almost to fancy, that in freakish mood, he had abandoned his mountain home to take a passing glance at men and things beneath him.

* * *

I will not pretend to describe the anxious, nay agonising hour that I passed in this highland ambuscade. The deep stillness of the waste was not broken even by the twittering of a bird. From the place where I lay concealed, I commanded a view of the defile for the distance of some eighty yards, and my eye turned to the path by which I expected the deer to approach, until to gaze longer pained me. My ear was equally engaged; the smallest noise was instantly detected, and the ticking of my watch appeared sharper and louder than usual. As time wore on my nervousness increased. Suddenly a few pebbles fell—my heart beat faster—but it was a false alarm. Again, I heard a faint sound, as if a light foot pressed upon loose shingle—it was repeated—by Saint Hubert, it is the deer! they have eu-

tered the gorge of the pass, and approach the rock that covers me, in a gentle canter!

To sink upon one knee and cock both barrels was a moment's work. Reckless of danger, the noble animals, in single file, galloped down the narrow pathway. The hart led the way, followed by the doe, and the old stag brought up the rear. As they passed me at the short distance of twenty paces, I fired at the leader, and, as I thought, with deadly aim; but the ball passed over his back, and splintered the rock beyond him. The report rang over the waste, and the deer's surprise was evinced by the tremendous rush they made to clear the defile before them. I selected the stag for my second essay; eye and finger kept excellent time, as I imagined—I drew the trigger—a miss by every thing unfortunate! The bullet merely struck a tyne from his antler, and, excepting this trifling graze, he went off at a thundering pace, uninjured.

* * *

The deer had separated—the hart and doe turned suddenly to the right, and were fired at by my cousin, without effect. The stag went right a-head; and while I still gazed after him, a flash issued from a hollow in the hill, the sharp report of Hennessey's piece succeeded, and the stag sprang full six feet from the ground, and tumbling over and over repeatedly, dropped upon the bent-grass with a rifle-bullet in his heart.

* * *

In addition to a herd of fallow deer, amounting to about one thousand six hundred, which are kept in Richmond Park, there is generally a stock of from forty to fifty red deer. Some stags from the latter are selected every year, and sent to Swinley, in order to be hunted by the king's stag-hounds. When a stag, which has been hunted for three or four seasons, is returned to the park, to end his days there, he is generally more fierce and dangerous than any of the others at a particular season of the year. At that time it is sometimes not safe to approach him: and the keepers inform me that they have been obliged to fire at them with buck shot, when they have been attacked by them. They account for this ferocity, by the circumstance of the deer having been much handled, and consequently rendered more familiar with, and less afraid of, those whom they would naturally shun. It is sometimes very difficult to take stags for hunting. One fine stag was so powerful, and offered so much resistance, that two of his legs were broken in endeavouring to secure him, and he was obliged to be killed. One who had shown good sport in the royal hunt, was named 'Sir Edmund,' by his late Majesty, in consequence of Sir Edmund Nagle having been in at the 'take' after a long chase. This stag lived some years afterwards in the park; and it is a curious fact that he died the very same day on which Sir Edmund Nagle died. This deer herded with the cows, probably from having been so long separated from his usual companions.

Does are longer lived than bucks. One doe in Richmond Park lived to be twenty years old; and there are other instances of their having attained the same age.

A curious circumstance lately occurred, respecting the red deer in the park in question. In the year 1825, not a single calf was dropped by any of the hinds, though they had bred freely the preceding, and did the same in the subsequent year. I find an event recorded in the 'Journal of a Naturalist,' as having happened in the same year in regard to cows. It is there stated that, for many miles round the residence of the author, scarcely any female calves were born. This diminution of the usual breed of deer, and the increase of sex in another animal, is not a little remarkable.

* * *

Of the stag's longevity much has been asserted, which latter observations have refuted, and upon the received maxim, that animals live seven times the number of years that bring them to perfection, and this requiring six to arrive at its maturity, the stag's age may be fixed at nearly forty years.

* * *

Of the stag's courage, when his personal safety requires it, the combat promoted by William, Duke of Cumberland, many years since, in an area where a stag was inclosed with a hunting tiger, and which made so resolute a defence that the tiger was at length obliged to give up, is a faithful record. It was in Ascot race week, and this novelty attracted an additional concourse of people. On a lawn by the road-side, a space was fenced in with very strong toiling, fifteen feet high, into which an old stag was turned, and shortly after the tiger was led in, hoodwinked, by two blacks who had the care of him, and his eyes and himself at once set at liberty. The instant he saw the deer, he crouched down on his belly, and creeping like a house-cat at a mouse, watched an opportunity of safely seizing his prey. The stag, however, warily turned as he turned, and this strange antagonist still found himself opposed by his formidable brow antlers. In vain the tiger attempted to turn his flanks, the stag had too much generalship, and this cautious warfare lasted until it became tedious, when his royal highness enquired, if, by irritating the tiger, the catastrophe of the combat might not be hastened; he was told it might be dangerous, but it was ordered to be done; the keepers went to the tiger, and did as they were ordered, when immediately, instead of attacking the deer, with a furious and elastic bounce, he sprang at, and cleared the

toiling that enclosed him; great indeed was the confusion amongst the affrighted multitude, every one imagining him or herself the destined victim to the tiger's rage, who, regardless of their fears, or their persons, crossed the road, and rushed into the opposite wood.

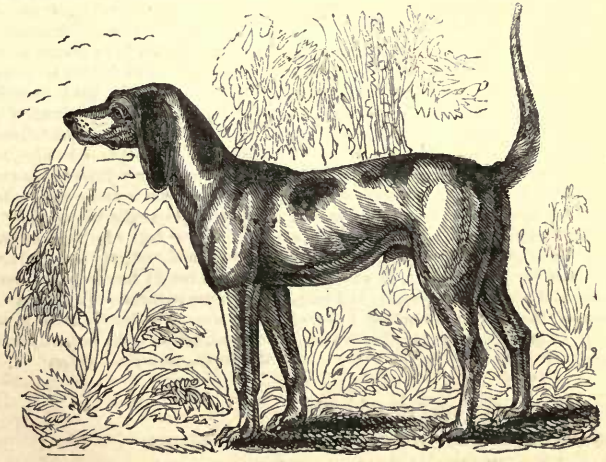
It happened a herd of fallow deer were feeding not far from the scene of action, on the haunch of one of them he instantly fastened, and brought it to the ground. His keepers, to whom he was perfectly familiarised, for some time hesitated to go near him; at length they ventured, cut the deer's throat, and separating the haunch he had seized, which he never left from his hold for a moment, hoodwinked, and led him away with it in his mouth. * * *

Stag Hunting.—I hunted two winters at Turin: but their hunting, you know, is no more like ours, than is the hot meal you there stand up to eat to the English breakfast you sit down to here. Were I to describe their manner of hunting, their infinity of dogs, their number of huntsmen, their relays of horses, their great saddles, great bits, and jack-boots, it would be no more to our present purpose than the description of a wild boar chase in Germany, or the hunting of jackalls in Bengal. *C'est une chasse magnifique, et voilà tout.* However, to give you an idea of their huntsmen, I must tell you that one day the stag (which is very unusual) broke cover, and left the forest; a circumstance which gave as much pleasure to me as displeasure to all the rest—it put every thing into confusion. I followed one of the huntsmen, thinking he knew the country best; but it was not long before we were separated: the first ditch we came to stopped him. I, eager to go on, hallooed out to him, "*Allons piqueur, sautez donc.*" "*Non pardi,*" replied he, very coolly, "*c'est un double fossé—je ne saute pas des double fossés.*" There was also an odd accident the same day, even to the king himself, you may think interesting; besides it was the occasion of a *bon mot* worth your hearing.—The king, eager in the pursuit, rode into a bog, and was dismounted: he was not hurt,—he was soon on his legs, and we were all standing round him. One of his old generals, who was at some distance behind, no sooner saw the king off his horse, but he rode up full gallop to know the cause, "*Qu' est ce que c' est? qu' est ce que c' est?*" cries the old general, and in he tumbles into the same bog. Count Kevenhuller, with great humour, replied, pointing to the place, "*Voilà ce que c'est! voilà ce que c'est!*"—*Le Keux—Jesse—Wild Sports—White of Selborne—Beckford.*

STAGECOACH, *s.* A coach that keeps its stages; a coach that passes and repasses on certain days for the accommodation of passengers.

STAGER, *s.* A player; an old cock grouse.

STAGHOUND (*Canis Strenuus*), *s.* A hound kept for hunting stags.



The stag-hound is now the largest and most powerful of all the dogs which go under the general term of hound. He is held higher in estimation than any other dog of chase, and

has a most commanding and dignified aspect, blended with every mark of intellectual mildness.

It has been asserted by the most celebrated naturalists, that the hound, harrier, turnspit, water-dog, and spaniel, are originally of the same race; and there seem to be strong reasons for believing this to be the case, as their figures and instinctive properties are nearly allied in all of these kinds; the principal difference consisting in the length of their legs and the size of their ears, which are in all of them soft in their texture and pendulous. The hound and harrier are supposed to be the natives of Britain, France, and Germany, an opinion which is attended with some degree of reason, for when transported to warmer climates they quickly degenerate.

It seems extremely probable that this large, strong, and bony hound was the primeval stock from which all the collateral branches of this race have descended, and that all deviations from the original stem have been the result of crosses and improvements, during many centuries, by those skilled in rearing and breeding dogs of the chase, and varied in size and strength, according to the particular sport for which they are intended. At the present day there cannot be a doubt but that the practical breeder, by judicious crosses, can either enlarge or diminish the stature and strength of his pack in the course of three or four generations.

The stag-hounds exclusively devoted to that sport, in the royal establishment of this country, it is well known, have been an improved cross between the old English southern hound and the fleeter foxhound, grafted upon the bloodhound. * * *

Things gradually continue thus to improve in proportion as the face of the country becomes more cultivated, till animals of the chace are greatly reduced in number, so much so, that even the stag is now but seldom seen in a state of nature in this country, decreasing as the sequestered places of its abode become fewer. They are now only to be met with in a state of unrestrained freedom in those extensive moors upon the borders of Cornwall and Devonshire, and in some places of the Highlands of Scotland, and the mountains of Kerry in Ireland, in which last place they add greatly to the beauty and magnificence of the justly celebrated Lake of Killarney, where they are pursued with hound and horn. * * *

There is a fine breed of buck-hounds in Richmond Park, and their sagacity is very extraordinary. In taking the deer, according to annual custom, either for the royal hunt or for the fattening paddocks, a stag or a buck, which has been previously fixed upon, is ridden out of the herd by two or three of the keepers in succession, each of whom is closely followed by a hound, the young dogs only being kept in slips. As soon as the deer has been separated from his companions, the dogs have the requisite signal given to them, and they immediately follow in pursuit. The scene is then highly interesting. A strong deer will afford a very long chase, but when he comes to bay the dogs generally seize him by the throat or ears; the keepers come up, take him by the horns, and after having strapped his hind and fore legs together, put him into a cart which follows for the purpose, and he is then disposed of as he may be wanted. I have seen an active young keeper throw himself from his horse upon a deer at bay, which he had come up to at full gallop, and hold his horns till assistance arrived. Some danger, however, attends this sport; as, when a deer has been hard pressed, I have seen him, in more than one instance, suddenly turn upon the horsemen and injure the horses, and in one case wound the leg of the horseman. The dogs are so well trained, and are so soon made aware which buck is intended to be caught, that they seldom make a mistake, even if the deer regains the herd after having been driven from it, but press him through it, till they have again separated him from it. It is well known that when a hard pressed deer tries to rejoin his companions, they endeavour to avoid and get away from him as much as possible, or try to drive him away with their horns. So severe is the chase in Richmond Park in taking deer, especially when the ground is wet, that three or four good horses may be tired by a single horseman in one day's deer taking, if each deer is ridden out of the herd, and followed till he is taken. When dogs are in slips, the man who holds them merely rides as near as he can to the person who is endeavouring to single out the deer, and awaits his signal for slipping the dog. These dogs who are a large, rough sort of greyhound, and very powerful and sagacious, are soon taught not to injure the deer when they come to them. The cry of 'hold them,' made use of by the keepers in urging them forward, seems to be perfectly understood by the dogs.—*Brown—Jesse.*

STAGGARD, *s.* A four-year-old stag.

STAGGERS, *s.* A kind of horse apoplexy; madness.

STAGNATE, *v.* To lie motionless, to have no course or stream.

STAIN, *v.* To blot, to spot, to dye.

Stake, *s.* A post or strong stick fixed in the ground; a piece of wood; anything placed as a palisade or fence; the post to which a beast is tied to be baited; anything pledged or wagered; the state of being hazarded, pledged, or wagered.

Stalk, *v.* To walk with high steps; to walk behind a stalking horse or cover; to follow deer.

Stalkinghorse, *s.* A horse, either real or fictitious, by which a fowler shelters himself from the sight of the game.

Stall, *s.* A crib in which an ox is fed, or where any horse is kept in the stable.

Stallfed, *a.* Fed not with grass but dry feeding.

Stallion, *s.* A horse kept for mares; a horse not castrated.

Stanch, *v.* To stop blood, to hinder from running.

Stand, *s.* A station; a place where one waits standing; station; a stop; a halt; stop, interruption; the act of opposing; highest mark; stationary point.

Standhouse, *s.* A building erected on a racecourse, to accommodate the subscribers or company generally.

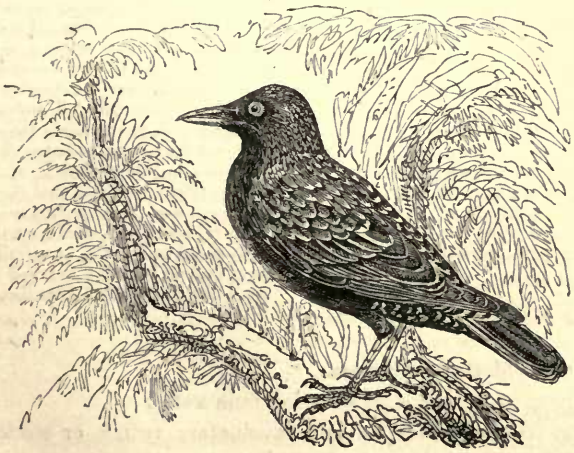
Star, *s.* One of the luminous bodies that appear in the sky; the pole star; mark on the forehead of a horse.

Stare, *v.* To be rough in the coat, as a horse.

Starfish, *s.* A fish branching out into several points.

Starhawk, *s.* A kind of hawk.

Starling or Stare, (*Sturnus vulgaris*, Linn.; *L'Etourneau*, Buff.) *s.* A bird that may be taught to whistle, and articulate words.



The length of this bird is somewhat less than nine inches. The bill is straight, sharp-pointed, and of a yellowish brown; in old birds deep yellow; the nostrils are surrounded

by a prominent rim; the eyes are brown; the whole plumage is dark, glossed with green, blue, purple, and copper, but each feather is marked at the end with a pale yellow spot; the wing-coverts are edged with yellowish-brown; the quill and tail-feathers dusky, with light edges; the legs are of a reddish-brown. From the striking similarity, both in form and manners, observable between this bird and its congeners, we have no scruple in removing it from its usual place, as it evidently forms a connecting link between them, and in a variety of points seems equally allied to both. Few birds are more generally known than the stare, it being an inhabitant of almost every climate; and as it is a familiar bird, and easily trained in a state of captivity, its habits have been more frequently observed than those of most other birds. The female makes an artless nest in the hollows of trees, rocks, or old walls, and sometimes in cliffs overhanging the sea; she lays four or five eggs, of a pale greenish-ash colour; the young birds are of a dusky-brown colour, till the first moult. In the winter season these birds fly in vast flocks, and may be known at a great distance by their whirling mode of flight, which Buffon compares to a sort of vortex, in which the collective body performs a uniform circular revolution, and at the same time continues to make a progressive advance. The evening is the time when the stares assemble in the greatest numbers, and betake themselves to the fens and marshes, where they roost among the reeds; they chatter much in the evening and morning, both when they assemble and disperse. So attached are they to society, that they not only join those of their own species, but also birds of a different kind, and are frequently seen in company with red-wings, fieldfares, and even with crows, jackdaws, and pigeons. Their principal food consists of worms, snails, and caterpillars; they likewise eat various kinds of grain, seeds, and berries, and are said to be particularly fond of cherries. In a confined state they eat small pieces of raw flesh, bread soaked in water, &c.; are very docile, and may easily be taught to repeat short phrases, or whistle tunes with great exactness, and in this state acquire a warbling superior to their native song.

* * *

The time to shoot starlings by wholesale is just before the dusk of the evening, when they come down to roost among the reeds. Here they assemble in swarms, that darken the air; and for some time keep up a chatter, which even surpasses that of Frenchmen in their warmest political debates.

Having swept down some dozens with your duck-gun, let their heads be immediately pulled off; as this will, in a great degree, prevent their having a bitter taste.

Starlings are very good when stewed with rice, or made into a curry.

* * *

Before I conclude under the head of starlings, I must ask leave to become my own trumpeter, in order to name a shot that I made at these birds, which will give some idea as to the manner in which they swarm together. Happening, in the early part of last winter, to have put my punt afloat on Lord Rodney's pond, at Alresford, I loaded my new double swivel-gun with a pound of small shot in each barrel, and a little before day-light paddled across to a retired part of the pond, where the reeds were literally swarming with these birds. Having placed the punt "stern on," so as to command the eastern light, and shoot well clear of the reeds, I gave a little signal, as previously agreed on, to Mr. Macilwain (who, with Captain Hill, was in another punt behind) to discharge both barrels of my little double gun. On hearing this report up sprung the whole army, consisting I should say of every starling in Hampshire, and making the valley echo like a peal of thunder. No sooner had they cleared the reeds than I opened my battery, and cut such a lane through them, as I could scarcely have thought possible, and the quantity of feathers which came flying back to leeward, I could compare to nothing but a fall of black snow. What number were killed and wounded we never could ascertain, from the extreme difficulty of getting the birds that fell among the reeds and quagmires, but we fairly bagged two hundred and forty-three, as fast as they could be picked up, and the workmen, when the reeds were cut down, declared that they found between two and three hundred more; for this, however, I have only their word, though there is no reason to doubt it, as we all felt confident that at least five hundred fell in this one volley.—*Bewick—Hawker.*

STARRED, *a.* Marked with stars.

STARSHOOT, *s.* A supposed emission from a star.

START, *v.* To feel a sudden and involuntary twitch or motion of the animal frame; to wince; to deviate; to set out from the barrier at a race; to set out upon any pursuit; to alarm.

START, *s.* A motion of terror; a sudden twitch or contraction of the frame; a sudden rousing of an animal; a quick spring or motion; first emission from the barrier; act of setting off.

Start in Racing.—The person appointed to start the horses shall mark in his list the time when the horses in each race actually started; and if there have been any false starts, the first of them shall be considered as the time of starting for that race. And he shall make a report thereof to the keeper of the match-book in the afternoon of the day the races are run. And if any delay beyond the allowed time shall have taken place, he shall state by whom, or by what cause, the delay was occasioned. He shall regulate his watch by the coffee-room clock, which shall be considered as the true time for this purpose.—*Turf Expositor.*

STARTLE, *v.* To fright, to impress with sudden terror.

STARVELING, *s.* An animal thin and weak for want of nourishment.

STEEL, *s.* Steel is a kind of iron, refined and hardened, of great use in the making of tools and instruments of all kinds; chalybeate medicines.

STEEL, *v.* To point or edge with steel; to make hard or firm.

STEELYARD, *s.* A kind of balance, in which the weight is moved along an iron rod, and grows heavier as it is removed farther from the fulcrum.

STEEPLE CHACE, *s.* A race over the country by hunters.

STEER, *s.* A young bullock.

STEM, *v.* To oppose a current, to pass across or forward notwithstanding the stream.

STERN. *s* The hinder part of anything; the tail of a dog.

STERN (*Sterna nigra*, LINN.), *s.*

This species is less than the common tern; weight about two ounces and three-quarters; length ten inches; bill black; irides dusky; forehead, sides of the head, beneath the eyes, throat, and fore part of the neck white; the rest of the head, back of the neck, and under part of the body, black; back, wings, and tail, deep ash-colour; vent and under tail-coverts white; the tail is less forked than in either of the other species; the outer feathers edged with white; legs dull red, the webs much indented or semipalmated. In some the forehead and fore part of the neck are mottled with black; and as most authors have omitted, or at least have not made mention of any white on the forehead, such is probably another variety. The female has no white about the head.—*Montagu.*

STERNA (LINN.), *s.* Tern, a genus thus characterised:—

Bill as long, or longer than the head, almost straight, compressed, fringed, cutting and pointed; the mandibles of equal length, the upper slightly inclined towards the point; nostrils towards the middle of the bill, slit lengthwise, and pierced from part to part; legs small, naked to above the knee; shank very short; four toes, the three fore ones reunited by a cut membrane, the hind toe free; claws small and arched; tail more or less forked; wings very long and pointed, the first quill the longest.

STEW, *v.* To seeth anything in a slow moist heat.

STEW, *s.* A storepond, a small pond where fish are kept for the table.

STICKLEBACK, *s.* The smallest of fresh water fish; applied to a horse means heavy, lazy, not flippant.

The *stickleback* is the smallest fish in this country, and is called by several names in different parts of it; they are not worthy the angler's notice, except as baits with the prickles cut off (which kills the fish), for which purpose they are equal to the minnow, or superior in pond fishing for perch; they may be taken with the least sized hook, and a bit of small red worm, and are found in little inlets of streams, and also in stagnated waters. Walton considers the stickleback preferable to the minnow, as being capable of

whirling round quicker, which is the perfection of this sort of fishing: to acquire this velocity, the hook is to be put in at the mouth and out at the tail, and having first tied him with white thread a little above the tail, and placed him in such a manner on the hook as he is likely to turn quick, his mouth is then sewed up to the line; should he not whirl so speedily as is wished, the tail should be more or less turned towards the inner part, or side of the hook, or put somewhat more crooked or straight on the hook, until it turns both true and fast: in a swift stream any great trout will be tempted; the loach will have the same effect, provided it be small.—*Daniel.*

STIFF, *a.* Rigid, inflexible; *stiff country*, heavy soil, much enclosed, difficult to ride over or pass through.

STIFLE, *s.* The bone of a horse.

The upper bone of the thigh is united to the lower by a somewhat complicated joint. It terminates by two round prominences behind, which are received into slight depressions on the upper surface of the lower bone; and in front is a curious groove over which plays a small irregular bone, the patella or stifle bone. The whole is called, by farriers, the stifle joint.

The stifle joint is not often subject to sprain. The heat and tenderness will guide to the seat of injury. Occasionally, dislocation of the patella has occurred, and the horse drags the injured limb after him, or rests it on the fetlock: the aid of a veterinary surgeon is here requisite. The muscles of the inside of the thigh, generally, have sometimes been sprained; this may be detected by diffused heat, or heat on the inside of the thigh above the stifle: rest, fomentations, bleeding, and physic, will be the proper means of cure.—*The Horse.*

STILTS, *s.* Supports or poles by which water may be crossed.

STIMULATE, *v.* To excite by some pungent motive; in physic, to excite a quick sensation, with a derivation towards the part.

STINT, *v.* To bound, to limit, to confine, to restrain; to impregnate a mare.

STIRRUP, *s.* An iron hoop suspended by a strap, in which the horseman sets his foot when he mounts or rides.

STOAT, *s.* An animal of the weasel tribe.

This animal, which is equally agile and mischievous with the weasel in pursuit and destruction of the hare, and all other sorts of game, poultry, and eggs, has, from its habits

and the small difference in shape from the weasel, been often described under the same denomination. Its height is about two inches; the tail five and a half, very hairy, and at the points tipped with black; the edges of the ears and ends of the toes are of a yellowish white; in other respects it perfectly resembles the weasel in colour and form. In the most northern parts of Europe the stoat regularly changes its colour in winter, and becomes perfectly white, except the end of the tail, which remains invariably black. It is then called the ermine: the fur is valuable, and sold in the country where caught, from two to three pounds sterling per hundred. The animal is either taken in traps, made of two flat stones, or shot with blunt arrows.

The stoat is sometimes found white during the winter season in Great Britain, and is then commonly called the white weasel. Its fur, however, having neither the thickness, the closeness, nor the whiteness, of those which come from Siberia, is, with us, of little value.

To destroy these worst of all four-footed vermin to game in its infant state, the following mode is recommended:—Provide small square-made steel traps, with a small chain and iron peg to fix them down; get two drachms of musk, shoot some small birds, and dip the tail of these birds in the musk; tie one on the plate of each trap, and set in the hedges, or where it is suspected they frequent: this will soon reduce the number, should it be ever so considerable: if it so happen, that no musk is immediately to be got, the trap must be baited with a bit of rabbit; and it should be remembered that this bait cannot be too stale.

* * *

Some time since, as Mr. Clarke, of Horndean, was going a few miles on foot, in the forest of Bere, to visit a friend, he observed a hare come into the green road before him, which seemed to be listening, and looking back for something which pursued her. He stood still, and hearing no dog, was curious to discover the cause of her alarm; when, to his great surprise, he discovered the object of it to be a small yellow red and white stoat, which hunted her footsteps with the utmost precision. He, wishing to know if so diminutive an animal could have a chance of coping with the great speed of the hare, retreated to a holm-bush hard by, where he was an attentive observer of this silent hunt for near two hours, during which, he is certain to have seen both hare and stoat at least forty times. They were frequently gone for five or ten minutes; but the hare, still unwilling to leave the place where she was found, came round again, and her little pursuer sometimes close at her heels. Towards the end of this remarkable chase, which became uncommonly interesting, the hare took advantage of the thickest covert the place afforded, and made use of all her cunning and strength to escape, but without effect; till at length, wearied out by the perseverance of the stoat, Mr. C. heard her cry for some time.

At last, the cries coming from one point, he concluded she was become the victim of the chase; on which he went to the spot, where he found the hare quite dead, and the stoat so intently fastened on her neck, as not to perceive his approach. The stoat, in its turn, now fell a victim to Mr. C's stick; after which, he proceeded with both hare and stoat to the house of his friend.—

Sporting Anecdotes.

Stock, *s.* The trunk, the body of a plant; a log; a post; the handle of anything; a support of a ship while it is building; a close neckcloth; a race, a lineage, a family. *Vide* Gun.

Stock, *v.* To store, to fill sufficiently; to fit a gun stock.

Stockdove, *s.* The ringdove.

Stockfish, *s.* Dried cod, so called from its hardness.

Stomach, *s.* The ventricle in which food is digested; appetite.

Stomach of Birds.—The stomach of birds forms them into two distinct natural classes: those with cartilaginous stomachs, covered with very strong muscles, called a gizzard; and those with membranaceous stomachs, more resembling that of carnivorous quadrupeds. The former is given to birds whose principal food is grain and seeds of various kinds, or other hard substances that require much friction to comminute, to assist which gravel is necessary; the latter is given to birds which feed upon flesh or fish, and whose digestion is accelerated more by the gastric juice than by the action of the stomach. Those of the first class digest or retain every substance swallowed; and those which eject or disgorge innutritious matter unavoidably taken in, such as feathers, fur, bones, &c., belong to the second class; as is conspicuous in the falcon (*Falconidæ*, Leach), and owl (*Strigidæ*, Leach), and others that feed on fish. Granivorous birds seem to possess a power of retaining the small stones taken into the gizzard, or evacuating them when they become polished and less use-

ful, but cannot disgorge them. In a state of nature the quantity of gravel taken in must be regulated, no doubt, by the sensation of the stomach; but, extraordinary as it may seem, in domesticated animals those instinctive faculties are deranged. We have known instances where the whole cavity of the gizzard has been filled with gravel stones. We once remember part of a brood of young ducks, half grown, taking in such a quantity of gravel, as not only filled the gizzard but the craw, and even the gullet; they soon after died. Many species of birds possess a reservoir for food, called a craw, or crop, which seems to answer the same purpose as the first stomach in ruminating animals, and here it is that the food is softened and prepared for the stomach, or carried to the young.

* * *

DISEASES OF THE STOMACH.

Flatulent colic, gripes, &c.—This is a disorder of considerable importance, and often terminates in inflammation of the bowels, entirely from the circumstance of not being sufficiently understood. The symptoms are well known. The horse is very uneasy, paws his litter, looks round to his flanks, sometimes endeavours to kick his belly, gathers up his hind legs, and falls down rather suddenly, rolls upon his back, suddenly gets up again, and appears in extreme pain. The pulse is in its natural state, and the inner surface of the eyelids is not unusually red. The disorder comes on suddenly, the animal being previously in good health. The horse is sometimes costive, but not often, and in some cases the dung is rather loose. Bleeding can scarcely be considered an essential remedy in this complaint, because it is often cured without it. But it is a safe practice, as the distension of the bowels by the confined air may otherwise produce inflammation before relief is afforded. It should never therefore be omitted. The next thing to be done is to give some carminative medicine; and about a pint of brandy or gin and water is as good a carminative as can be given: on all common occasions it may be considered the best, because it is the most innocent as well as effectual. There are cases, however, where the stomach has been so injured by ill treatment, that a more powerful medicine is required. The following tincture should then be given in the dose I shall soon name. Brandy and water, however, that is, from four to six ounces of brandy to twelve ounces of water, should always be preferred, because it is sufficiently strong, in almost all cases, to answer the purpose. For it should be known that the strong medicines usually employed in this disorder, especially oil of turpentine and peppermint, pepper, large doses of ginger and grains of paradise and opium, though they generally afford relief, are sure to increase the disposition to the disorder by weakening the stomach. The weakest stimulant, therefore, that will afford relief with certainty should be preferred, and its repetition avoided for the future, by avoiding the causes which produced the disorder, and these will soon be pointed out.

It sometimes happens, and not unfrequently, that there is an accumulation of excrement in the cœcum, by which the valvular orifice is so completely obstructed, that it cannot be overcome by any efforts of the stomach, though excited by opium and the most powerful carminatives. Clysters in this case will always afford relief, if properly administered; that is, by means of a large ox's bladder and a long pewter pipe, not less than fourteen or fifteen inches in length. The only clyster required is from half a pound to a pound of salt, and five or six quarts of warm water. This will excite the whole of the large bowels to action, and dislodge the fæces from the cœcum. By this means the animals may always be relieved, and without it he will in such cases certainly die.

There are cases of flatulent colic, however, which are in their nature incurable, that is, first, when there is such a quantity of food taken into the stomach, and the digestive power of the organ has been so depressed by previous disorder, that no effort it can make, however powerfully it may be excited, can enable it to get rid of its contents. Secondly, when the horse is put to work, and into quick exercise in that state: such cases are by no means uncommon in post and coach horses, and rupture of the stomach is sometimes the consequence. When this happens, the horse breaks out into a profuse, but very cold perspiration, is extremely depressed, breathes quickly; the pulse can scarcely be felt, but is very quick. It is soon followed by death. The distension of the small intestines sometimes forces a portion of them through the mesentery, in such a manner that one coil of it becomes so completely tied that the included air cannot escape.

ANODYNE CARMINATIVE TINCTURES, RECOMMENDED FOR RELIEVING COLIC.

Turkey opium . .	1 oz.
Cloves, bruised . .	2 oz.
Ginger, ditto . .	3 oz.
Brandy, rum, or gin .	1 quart.
Or, Turkey opium, cloves, and ginger, of each .	1 oz.
The best old brandy, rum, or gin . . .	1 quart.

Let them be digested together in a well-corked bottle, and shaken several times a day for three or four weeks. It is then to be strained through blotting paper, and is fit for use. The medium dose is two ounces, which may be given in a little mild ale, or an infu-

sion of some aromatic herb, such as peppermint, pennyroyal, camomile, &c. Mr. Bracey Clarke recommends a tincture made with allspice, bruised, half a pound; brandy, gin, or rum, two quarts. The following mixture has been found effectual.

Camphor . .	. ½ oz.
Oil of turpentine	. 6 oz. Mix.

One half of this is a dose, and if the first dose does not afford relief, the second, it is said, has always been found effectual.

I am inclined to believe that flatulent colic is sometimes brought on by drinking largely of cold pump water, or hard water, in hot weather.

Stomach staggers, or sleepy staggers—Paralysis of the stomach.—The symptoms of this disorder are great heaviness and drowsiness, resting the nose in the manger, or inclining the head, and resting the cheek, or bearing against the wall. The head is forced against the manger, or rack, or the nose between the rack staves. In this way the eyes and face are often much bruised and swollen. The horse stands with his fore leg much under him, appearing to give way every now and then, as if he would fall. There is an appearance of convulsive twitching of the muscles of the neck and chest. There is, too, a great degree of yellowness, approaching to orange-colour, of the membranes of the eyes, and often a yellowness of the mouth also. Urine scarcely any, and high-coloured; sometimes none is voided, and sometimes it is discharged by a convulsive effort. Sometimes the disorder is attended with locked jaw, ending in paralysis and death. In the early stage of the disorder the horse is sometimes suddenly roused by opening the stable door, he lifts up his head, and sometimes neighs; but this is only a momentary effort. When the disease happens at grass, the animal is generally found forcing his head against the hedge, or a gate, or moving about in a state of stupor and apparent insensibility. Sometimes he is found struggling in a ditch, and in that situation he often dies.

As soon as stomach staggers are observed, the horse should be bled, in order to relieve the head in some degree; but the principal object is to enable the stomach to get rid of the load which oppresses it. Various remedies have been proposed for this purpose. The best I believe are purgatives joined with cordials and stimulants, and small quantities of warm water frequently, in order to soften the contents of the stomach. Clysters of salt and water are useful also, and should be thrown up several times a day. The disease is often incurable, probably from a want of early attention.

When medicine cannot be readily procured, two or three tablespoonfuls of flower of mustard, and three or four ounces of common salt may be tried.

DRENCH FOR THE STAGGERS.

No. 1.

Barbadoes aloes .	. 6 dr. to 1 oz.
Calomel . .	. 2 dr.
Oil of peppermint .	. 20 drops.
Warm water .	. 1 pint.
Tincture of Cardamoms	. 2 oz.

Mix for one dose.

No. 2.

Common salt .	. 4 oz.
Ginger .	. 2 dr. or 2 teaspoonfuls.
Carbonate of soda.	. 1 oz.
Water . .	. 1 quart.

Mix for one dose.

About a quart of water may be given every now and then with a horn; and if a teaspoonful or two of compound spirit of ammonia (sal volatile) be added to it, the effect will be promoted. A tablespoonful or two of common salt may also be added three or four times a day. The horse should be drenched and clystered during the night as well as the day; in short, without unremitting attention success must not be expected.—*Montagu—White.*

STOMACHIC, *s.* A medicine for the stomach.

STONE, *s.* Stones are bodies insipid, hard, not ductile or malleable, not soluble in water; calculous concretion in the kidneys or bladder.

STONECHATTER, *s.* A bird; the wheatear.

STONEFLY, *s.* An insect.

STONEHAWK, *s. obs.* A kind of hawk.

STONEHORSE, *s.* A horse not castrated; a stallion.

STONEPLOVER, *s.* A bird, commonly called the red godwit.

STOOLBALL, *s. obs.* A play where balls are driven from stool to stool.

STOOP, *v.* To bend down; to bend forward; to submit; to descend from rank or dignity; to come down on prey as a falcon: to alight from the wing.

STOOP, *s.* Act of stooping; fall of a bird upon his prey.

Stop, *v.* To hinder from progressive motion; to teach dogs to stand to game.

Stopping for the Feet.—A mixture of clay and cowdung, or either of these separately, is commonly used for this purpose; and, by keeping the bottoms or soles of the feet moist and cool, often does good. In soles that are too thin and soft, or for the frogs when in that state, the following composition is more proper: Tallow and tar, of each 1 lb.

To be mixed by melting together.

Mr. Goodwin has contrived a kind of boot for keeping the feet cool and moist, as well as for applying the above composition.—*White.*

Stork, *s.* A bird of passage, famous for the regularity of its departure.

Straggler, *s.* A wanderer; a rover; anything that separates from the rest, or stands singly.

Strain, *v.* To squeeze through something; to purify by filtration; to sprain, to weaken by too much violence; to put to its utmost strength.

Strain, *s.* An injury by too much violence; race, generation, descent.

Strand, *s.* The verge of the sea or of any water; a division or portion of a rope.

Strangles, *s.* A disease incident to young horses.

The treatment of strangles is very simple. As the essence of the disease consists in the formation and suppuration of the tumour under the jaw, the principal, or almost the sole attention of the practitioner should be directed to the hastening of these processes; therefore, as soon as the tumour of strangles evidently appears, the part should be actively blistered. Old practitioners used to recommend poultices, which, from the thickness of the horse's skin, must have very little effect, even if they could be confined on the part; and from the difficulty and almost impossibility of this, and their getting cold and hard, they must weaken the energies of nature, and delay the ripening of the tumour. Fomentations are little more effectual. A blister will not only secure the completion of the process, but hasten it by many days, and save the patient much pain and exhaustion; and it will produce another good effect—it will, previous to the opening of the tumour, abate the internal inflammation and soreness of the throat, and thus lessen the cough and wheezing.

If there is much fever, and evident affection of the chest, and which should carefully be distinguished from the oppression and choaking occasioned by the pressure of the tumour, it will be proper to bleed.

A few cooling medicines, as nitre, emetic tartar, and perhaps digitalis, may be given, as the case requires. The appetite, or rather the ability to eat, will return with the opening of the abscess. Bran-mashes, or fresh cut grass or tares, should be liberally supplied; which will not only afford sufficient nourishment to recruit the strength of the animal, but keep the bowels gently open. If the weakness be not great, no further medicine will be wanted, except a dose of mild physic, to prevent the swellings or eruptions which sometimes succeed to strangles. In cases of debility, a small quantity of tonic medicine, as camomile, and gentian with ginger, in doses of a couple of drachms, may be administered.—*The Horse.*

Strangury, *s.* A difficulty of urine, attended with pain.

Strap, *s.* A narrow long slip of cloth or leather.

Straw, *s.* The stalk on which corn grows, and from which it is threshed.

Strawcoloured, *a.* Of a light yellow.

Stream, *s.* A running water; the course of running water; current.

Stretcher, *s.* Anything used for extension; the timber against which the rower plants his feet.

Stride, *s.* A long step, a wide stretch of the legs; the pace of a horse.

Stringhalt, *s.* A sudden twitching and snatching up of the hinder leg of a horse much higher than the other.

Stripe, *s.* A lineary variation of colour; a shred of a different colour; a weal, or discoloration made by a lash or blow; a blow, a lash.

Structure, *s.* Act of building, form, make; edifice, building.

Under the term *Structure of the Eye*, Mr. White, describing its anatomy and physiology, divides the subject into two parts, that is, the eye itself and its appendages. Under the latter head, he comprehends the eyelids, the muscles which move it, the eyelashes, the lachrymal gland, the puncta lachrymalia, and lachrymal duct, the caruncle of the eye, the haw, and the membrane named conjunctiva, and the muscles by which the eye is moved.

He then proceeds:—Having described the appendages, as they are termed, I shall proceed to a description of the eye itself, the structure and economy of which is most curious and interesting. It is said to be composed of coats and humours, and this perhaps is the best manner of considering it. The first coat that appears is the cornea, or glass of the eye, which forms the anterior part, and is beautifully transparent. It is not of a circular form, as in man, but of an irregular oval, or rather oblong form, when examined out of the socket; but in its natural situation in the living horse, that part which projects beyond the eyelids is of a regular oval, or rather of an oblong form, and corresponding in some degree with the form of the pupil. It forms a larger portion of the globe of the eye than in man, and, by its convexity, causes the rays of light which pass through it to converge towards the pupil. This convexity may be too great or too little, and in either case render vision somewhat imperfect, and cause starting. The convexity of the cornea is preserved by the fluid which it incloses, named aqueous humour. On puncturing the cornea this fluid escapes, and then the cornea becomes flat and wrinkled. On removing the cornea the iris appears, which is a thin delicate brown or blackish muscle, with an oblong hole in the centre, named pupil. The iris is composed of two orders of fibres; the one circular, which, by contracting, diminishes, and even closes the aperture in the centre, named pupil; the other radiated, which by contracting, opens or enlarges the aperture or pupil. The second humour of the eye is situated immediately behind the pupil, and is named crystalline humour, or crystalline lens. On taking it out it appears to be a solid and beautifully transparent double convex lens, the posterior surface of which is more convex than the anterior one. It is found to become denser and denser from the circumference to the centre, and the slightest pressure so deranges it as to lessen or destroy its transparency.

The crystalline humour may be considered as composed of numerous concavo-convex lenses, admirably fitted to each other; those of the largest size having their circumference or edge opposed to and nicely joined to each other, thus forming altogether a double convex lens. The point of union between the two largest lenses is embraced by a band of muscular fibres, disposed in a circular direction, and named the ciliary ligament. These, by contracting, assisted probably by the muscles of the eye, increase the convexity of the crystalline lens, or rather of the series of concavo-convex lenses, of which the eye is composed, in a manner so just and equal, as to adapt it to the distance of the object at which the animal is looking, while, by the relaxation of these muscular fibres, the convexity of the lens is diminished by its own elasticity. These changes take place with inconceivable rapidity and accuracy. There are other muscular fibres proceeding from the band of circular fibres named ciliary processes, in a straight, or rather radiated, direction, towards the second coat of the eye, named tunica choroides; these are so arranged as to be drawn into folds, by which disposition they are enabled to perform their office more easily, which is that of drawing the lens towards the optic nerve, and thereby increasing the intensity of vision, whereby the animal is enabled to see small objects distinctly. The crystalline lens is inclosed in a transparent capsule, which is not in contact with it, there being about one drop, as it is computed, of a transparent liquid interposed, which, from the anatomist's name who first observed it, has been called 'liquor Morgagnii.'

I have seen a case where the convexity of the lens has been so increased, by an unusual degree of contraction of the circular fibres, named ciliary ligament, that it burst the capsule, and was forced out of its situation. I found it lying with its posterior convex surface on the inferior margin of the iris; about half of it appearing in the anterior chamber of the eye, as it is termed. The transparency of the lens was not affected, at least, it appeared so to me, and I rather think the accident had occurred, just at the time I observed it, from twitching the horse violently. In cataract, a disorder in which the crystalline lens becomes opaque, it always becomes globular in its form from an irritable state of the band of circular fibres; the same effect may be observed in the circular fibres of the iris, causing the pupil to be small, even in a mode-

rate light, while the inflammation is going on, which occasions the cataract; but when the opacity is such as to exclude the light from the posterior part of the eye, which contains the third or vitreous humour, with the choroid coat, retina, and optic nerve, then the circular fibres relax, and the radiated fibres draw up the iris somewhat irregularly, which adhering to the capsule of the opaque lens, the pupil remains permanently open.

All that part of the eye which is posterior to the iris, is chiefly occupied by the third, or vitreous humour, and it is in this humour that the crystalline lens is imbedded. The vitreous humour is perfectly transparent, and consists of a fluid, inclosed in numerous small transparent cells, all of which appear to be inclosed in one delicate transparent membrane, named tunica arachnoidea. If the vitreous humour is cut, by snipping it with scissors, a fluid, like water, drops from it freely, so that it appears to be nothing more than water, probably holding a little salt in solution, which escapes when the transparent cells are thus cut open.

That part of the vitreous humour in which the lens is imbedded is different from the other parts, and of the consistence of jelly. Immediately behind the ciliary ligament, as it is termed, the arachnoid coat may be inflated with a small blowpipe, and made to resemble a circular canal; this has been called from the name of the person who first observed it, the circular canal of Petit. It is supposed to be connected with the radiated fibres of the iris. I have seen the whole of this humour in the eye of a sheep that had an hydatid in the right ventricle of the brain, of the consistence of jelly.

It is now time to speak of the optic nerve, and its appendage, the retina, with the third coat of the eye, named tunica choroides. The retina is a delicate transparent membrane, which embraces the vitreous humour, and is supposed to be an expansion or production of the optic nerve, serving to receive the impressions of objects, in order that they may be conveyed by the optic nerve to the organ of vision, named thalamus nervi optici, or speaking of both organs, thalami nervorum opticorum. After death, the retina becomes opaque, and of a light grey colour. It is so delicate a membrane, that there is some difficulty in preserving it for exhibition unless the eye is quite fresh. Under the retina lies the choroid coat, which is nothing more than a plexus of blood vessels, covered with a mucus substance of different colours. In the human eye it is black, which is the cause of the human pupil, or apple of the eye, appearing black; but in the horse it is variegated with mucus of a purple, a blue, a green, and a black colour, which, blending together, causes the pupil to appear of a dark blue colour. This mixture of colours in the bottom of the eye, or choroid coat, has been named tappetum lucidum.

The last and most considerable coat of the eye is the sclerotic coat, which is a very strong thick membrane, including all the other coats and humours, except the cornea. The sclerotic coat forms the greater portion of the globe of the eye, and is intimately united towards the anterior part with the cornea, which may be viewed as bearing the same relation to the sclerotic coat, as the glass of a watch does to the case. By maceration in water the cornea separates from the sclerotic coat completely.

* * *

Diseases of the eye.—Though the horse's eye is commonly supposed to be subject to a variety of diseases, they may, without impropriety, be comprehended under two heads. That is, disorders which arise from internal causes, and such as are occasioned by blows, bites, and other accidents. The former are generally, I may say almost always, incurable; that is, they are incapable of a perfect cure, or, in other words, the eye is very rarely perfectly restored after being so affected, unless a complete cataract, or total blindness, takes place in one eye.—*White.*

Stub, *s.* A thick short stock left when the rest is cut off; a log, a horse nail. **Stub-barrel**, *s.* *Vide* **Barrel**.

Stubble, *s.* The stalks of corn left in the field by the reaper.

Stubborn, *a.* Obstinate, stiff, inflexible; harsh, rough, rugged.

Stub-net, *s.*

Stub-nets are very useful in catching carp or trout, when they flee to the banks. They should be made of very strong twine, inch and quarter mesh, be nine feet long, with cork and lead line; upon which there should be plenty of each: a few widenings should be thrown into the middle, so that there may be a little appearance of a bag; the net is then to be firmly fastened (so that it stands from lead to cork, three or four feet deep) to two ash pitchfork handles, shod with iron spikes at one end. In surrounding a stub, one spike is to

remain fixed in the ground, whilst the other is thrust underneath the stub: the fish, thus annoyed, try to regain the deep water, and strike into the bosom of the net, which is then hoisted up, the fish taken out, and the net put down for other trials. If the stubs are very jagged, both spikes are to be stuck in the ground as close as possible to the harbour, and the parties grope with their hands, and those fish which escape their fingers are caught in the stub-net.

STUD, *s.* A post, a stake; a nail with a large head driven for ornament; a collection of breeding horses and mares.

STUMBLE, *v.* To make to trip or stop. STUMBLE, *s.* A trip in walking.

STUMP, *s.* The part of any solid body remaining after the rest is taken away.

STUNT, *v.* To hinder from growth.

STUPE, *s.* Cloth or flax dipped in warm medicaments, applied to a hurt or sore. STUPE, *v.* To foment, to dress with stupes.

STURGEON, *s.* A sea fish.

STURK, *s.* A young ox or heifer.

STURNIDÆ (VIGORS), *s.* Starlings, a family of perchers (*Insessores*, VIGORS).

STURNUS (LINN.) *s.* Starling, a genus thus characterised.

Bill strait, depressed, rather obtuse, and slightly awl-shaped, the base of the upper mandible advancing upon the front; the point depressed; nostrils at the sides of the base, and partly closed by a prominent rim; wings long, the first feather very short, the second and third the longest in the wing, and of nearly equal length; feet with three toes before and one behind, the middle toe being united to the outer one as far as the first joint.—*Montagu.*

STY, *s.* A cabin to keep hogs in; any place of low debauchery.

STY, *v.* To shut up in a sty.

STYPTIC, *a.* The same as astringent, but generally expresses the most efficacious sort of astringents, or those which are applied to stop hæmorrhages.

Styptics are medicines which constringe the blood-vessels when wounded, so as to stop an effusion of blood. Many preparations have been recommended for this purpose: but when the size of the wounded vessel is at all considerable, an adequate degree of pressure by means of bolsters and bandages is alone to be depended upon; and when that cannot be done, the vessel must be tied up above the wound and below, by which the bleeding will be effectually suppressed. No danger is to be apprehended from slight bleedings in the horse, as they always cease spontaneously.

The styptics commonly employed are oil of turpentine, diluted vitriolic acid, muriate of iron, absorbent earths, and flour.—*White.*

SUBLIMATE, *s.* Anything raised by fire in the retort; quicksilver raised in the retort.

SUCK, *s.* The act of sucking; milk given by females.

SUDATORY, *s.* Sweating.

SUDORIFIC, *s.* A medicine provoking sweat.

SUET, *s.* A hard fat, particularly that about the kidneys.

SULPHUR, *s.* Brimstone.

SULPHUROUS, *a.* Made of brimstone, having the qualities of brimstone; containing sulphur.

SUMMED, *s.* A term in falconry to describe the hawk's condition when fully feathered, and ready to leave the mew.

SUMMER, *s.* The season in which the sun arrives at the hither solstice.

Summering Hunters.—Lest it should be supposed that I am averse to turning hunters out at all in the summer months, it will be better, perhaps, not to proceed farther without explaining myself on that head. So far from being averse to it, I would strongly recommend it, under favourable circumstances. In case of having recourse to blistering, it is most serviceable; and after firing, almost necessary; but then they should be turned out only at night, and into a place where there is but little grass, and have two, if not three feeds of corn a day, but nothing else to eat till they go out, unless it be a few vetches, for four or five days at a time, when they are young and tender, in the months of May or June; but this should not be repeated more than three or four times, as they tend to make horses very foul, and when in pod are most injurious to them. It is not every one who keeps hunters that has paddocks to turn them into; nor, indeed, do they fall to the lot of many; but when they are to be had the advantage is great, as a horse is safe in them, and the smaller they are, within reason, the better; for it is not the grass that we want, but the exercise and the moisture of the ground for their feet, and the bracing effects of the pure air. If only one or two hunters are turned into a large paddock, and the grass grows upon them, some sheep should be put in with them to keep it down. Their bite also sweetens the herbage, and makes it more nutritious; but paddocks should never be mown. Paddocks, however, are always to be made, and at a trifling expense. A small piece of ground—say thirty square yards—is sufficient. Let it be hurdled round, and then lined with fagots reared up from seven to eight feet high. A stallion may be kept in these places with the greatest safety as to his breaking out of them, for he will never attempt it so long as he cannot see through or over the fence. The fagots, so far from being worse, are better for the use they are put to; and they are within the reach of every one who resides in the country, at five shillings a score, if he do not grow them himself. The hurdle that lets the horse in and out should often be changed, and then he will be still less inclined to attempt to break out.

However beneficial this turning out a horse in the summer may be, it is comparatively trifling with the advantages that are reaped by a winter's run. I have seen horses, as it were, renovated in their constitution, by being turned out for a winter; and, as far as relates to their legs and feet, it is, I think, the only time when anything effectual can be done for them, when the injury has been considerable.—

* * *

It is said that the Earl of Plymouth first tried the plan of summering his hunters altogether within the stable, with little variation in their treatment; by which it is asserted their condition was fully preserved, and that, by this means, his horses entered on their hunting season in full wind, speed, and bottom. Others, to avoid this extreme, have soiled their hunters in the stable, or have given carrots; and some have gone a step further, and have pursued the in-door summering, not in stables, but in loose boxes. Still, in all these cases, regular exercise is required, or the feet must suffer, or the horses are apt to become pursy, thick-winded, roarers, or broken-winded. This exercise is apt to be severe, and then the wear on the limbs continues the deterioration which the hunting season had brought on. But if a sportsman had one, two, or three hunters only, and would use them gently every day as hacks, he might then summer them in this way without injury to the horses, provided they had not suffered much from strains or foot lamenesses; in which case absolute rest would of course be requisite. It would therefore seem from all this, that a medium plan, which should combine the renovating effects of air, mild exercise, moisture to the feet, and the relaxent effects of grass, might be followed with much more propriety and hope of general advantage than either total turning out on grass, or total confining within on hay.

The box summering of hunters, in my opinion, is of this kind, and consists in allowing each hunter his liberty in a loose box, having fly wire casements and closed doors during the day, in which he is to be moderately fed with corn and hay. At night, unless it be stormy or very cold, he is to be turned out into a small sheltered paddock, which affords only a short bite of upland grass, of which an acre is sufficient for each horse; but not more than three should be together, to avoid violent racing about amongst them, and other accidents. When the field is eaten quite bare, a similar plot may be substituted; but, in all cases, an open shed within each field, independent of the boxes, should afford a refuge against accidental storms and rain. At an early hour every morning the hunter should be taken to his box, from whence he is not again to come out till the evening, unless a very favourable gloomy day offers itself. Carrots may be substituted for part of the

corn and hay with advantage in stable summering; which variation, and many others, will present themselves, and prove beneficial, when the true principles on which the subject should be considered form the basis of the determination. The treatment of the feet during this period must be regulated by circumstances; one or two quiet horses, used to each other, may be allowed to range together without removing the hinder shoes; but it is always a safer plan to take them off, unless the ground be very hard, or the box be paved. This latter circumstance can always be obviated, by allowing these boxes to be covered over either with tan, sod, or other soft matter; but boxes expressly built for this particular purpose would be better altogether unpaved; in which case, to avoid dust, and to keep the flooring cool, it might be moderately watered every morning. The fore feet may be tipped, particularly if at all inclined to contraction; or should they become hard, hot, and dry, such means must be made use of as the medical parts of the work direct, under diseases of the feet. The general state of the horse ought also be attended to, as his bowels, that they do not become costive; and the skin, that it do not become hide-bound or eruptive, or that a short dry cough may not steal a march unobserved on him. The careful and intelligent groom must watch over the health of his in-door summered horses with vigilance, and alter his plan according to circumstances; but the still more prudent owner would do well to have them inspected weekly by a well-informed veterinary surgeon.—

Nimrod—Blaine.

Supple, *a.* Pliant, flexible; fawning, bending.

Suppurate, *v.* To grow to pus.

Suppuration, *s.* The ripening of the matter of a tumour into pus.

Surcingle, *s.* A girth with which the saddle or sheet is secured.

Surefooted, *a.* Treading firmly, not stumbling.

Surfeit, *v.* To feed with meat or drink to satiety and sickness.

Surfeit, *s.* A disease incident to horses and dogs.

Large pimples or lumps often suddenly appear on the skin of the horse, and especially in the spring; and occasionally they disappear as quickly as they come. Sometimes they seem to be attended with great itching, but in others they appear not in the least to annoy the animal. When they have remained a few days, the cuticle frequently peels off, and a small scaly spot, though rarely a sore, is left. This is called a surfeit, from its resemblance to some eruptions on the skin of the human being, when indigestible or unwholesome food has been taken. These lumps are, in some cases, confined to the neck; but they oftener spread over the sides, back, loins, and quarters.

Bleeding will always be beneficial—from three to five quarts may be taken, according to the strength of the horse, the extent of the eruption, and the degree of fever. Physic never does good. Alteratives will be found useful—and particularly the alterative which was recommended for hide-bound, and in the same doses. These should be given on several successive nights. The night is better than the morning, because the warmth of the stable will cause the antimony and sulphur to act more powerfully on the skin. The horse should be warmly clothed—half an hour's walking exercise should be given, an additional rug having been thrown over him —such green meat as can be procured should be used in moderate quantities, and the chill should be taken from the water.

* * *

A cuticular eruption, called surfeit, is a fourth appearance that mange frequently assumes. It seems, in many cases, the consequence of some active inflammatory state of the constitution, frequently of some great local internal inflammation; in which cases it puts on something of an acute form. It sometimes breaks out suddenly in bitches after pupping; and in dogs newly recovered from distemper; in fact, any great vascular excitement may produce it; thus, when a dog travels during a great part of a very hot day, and becomes afterwards exposed to cold, a surfeit is oftentimes the consequence. It is usually seen in the form of partial blotches, it being seldom that it extends universally ever the body. In some cases there is little appearance of elevated scab; but large patches show themselves, from which the hair has fallen, and left the skin bare and rough from the branny scaly eruption, which itches with more or less violence. Some sportsmen allege that a surfeit is sometimes occasioned by giving food in a hot state. Salt provisions have certainly brought it on; and long-continued feeding on oat or barley meal has done the same.—

The Horse—Blaine

Surgery, *s.* The art of curing by manual operations.

Suture, *s.* A manner of sewing or stitching, particularly wounds.

Swallow (*Hirundo*, Auctores), *s.* A genus of perchers (*Insessores*, Vigors), of which we have three species natives—the bank, the chimney, and the window swallow.

Swallow, *s.* A small bird of passage, or, as some say, a bird that lies hid and sleeps in winter.

Swallows are found in every country of the known world, but seldom remain the whole year in the same climate; the times of their appearance and departure in this country are well known: they are the constant harbingers of Spring, and on their arrival all nature assumes a more cheerful aspect. The bill of this genus is short, very broad at the base, and a little bent: the head is flat, and the neck scarcely visible; the tongue is short, broad, and cloven; tail mostly forked; wings; legs short.

Of all the various families of birds, which resort to this island for food and shelter, there is none which has occasioned so many conjectures respecting its appearance and departure as the swallow tribe. The habits and modes of living of this tribe are perhaps more conspicuous than those of any other. From the time of their arrival to that of their departure they seem continually before our eyes.

The swallow lives habitually in the air, and performs its various functions in that element; and whether it pursues its fluttering prey, and follows the devious windings of the insects on which it feeds, or endeavours to escape the birds of prey by the quickness of its motion, it describes lines so mutable, so varied, so interwoven, and so confused, that they hardly can be pictured by words.

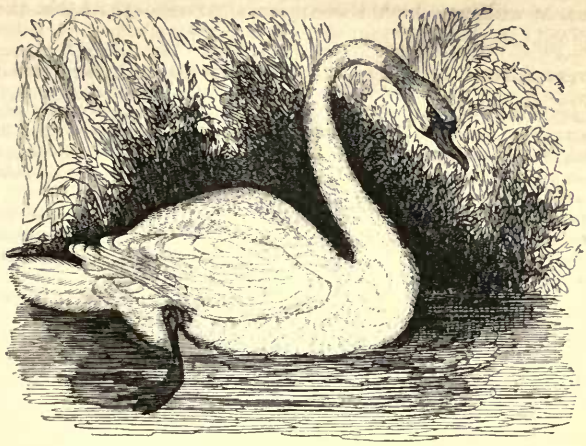
Not many attempts have been made to preserve swallows alive during the winter, and of these few have succeeded. The following experiments, by Mr. James Pearson of London, we shall give nearly in his own words.

Five or six of these birds were taken about the latter end of August, 1784, in a bat fowling-net, at night; they were put separately into small cages, and fed with nightingales' food; in about a week or ten days they took food of themselves; they were then put altogether into a deep cage, four feet long, with gravel at the bottom; a broad shallow pan with water was placed in it, in which they sometimes washed themselves, and seemed much strengthened by it. One day Mr. Pearson observed that they went into the water with unusual eagerness, hurrying in and out again repeatedly, with such swiftness as if they had been suddenly seized with a frenzy. Being anxious to see the result, he left them to themselves about half an hour, and on going to the cage again, found them all huddled together in a corner, apparently dead; the cage was then placed at a proper distance from the fire, when only two of them recovered, and were as healthy as before; the rest died. The two remaining ones were allowed to wash themselves occasionally for a short time only; but their feet soon after became swelled and inflamed, which Mr. P. attributed to their perching, and they died about Christmas; thus the first year's experiment was in some measure lost. Not discouraged by the failure of this, Mr. P. determined to make a second trial the succeeding year, from a strong desire of being convinced of the truth respecting their going into a state of torpidity. Accordingly, the next season, having taken some more birds, he put them into the cage, and in every respect pursued the same methods as with the last; but to guard their feet from the bad effects of damp and cold, he covered the perches with flannel, and had the pleasure to observe that the birds throve extremely well; they sung their song through the winter, and soon after Christmas began to moult, which they got through without any difficulty, and lived three or four years, regularly moulting every year at the usual time. On the renewal of their feathers, it appeared that their tails were forked exactly the same as in those birds which return hither in the spring, and in every respect their appearance was the same. These birds, says Mr. Pearson, were exhibited to the Society for promoting Natural History, on the 14th day of February, 1786, at the time they were in a deep moult, during a severe frost, when the snow was on the ground. Minutes of this circumstance was entered in the books of the society. These birds died at last from neglect, during a long illness which Mr. Pearson had; they died in the summer. Mr. Pearson concludes his very interesting account in these words:—January 20, 1797. I have now in my house, No. 21, Great Newport-street, Long Acre, four swallows in moult, in as perfect health as any birds ever appeared to be when moulting.—*Bewick.*

Swallow, *v.* To take down the throat; to ingulf.

Swamp, *s.* A marsh, a bog, a fen. Swampy, *a.* Boggy, fenny.

SWAN, *s.* A large waterfowl.



Mute Swan. (*Anas Cygnus Mansuetus*, LINN.; *Le Cygne*, BUFF.)—The plumage of this species is of the same snowy whiteness as that of the wild swan, and the bird is covered next the body with the same kind of fine close down; but it greatly exceeds the wild swan in size, weighing about twenty-five pounds, and measuring more in the length of the body and extent of the wings. This also differs in being furnished with a projecting callous black tubercle, or knob, on the base of the upper mandible, and in the colour of the bill, which in this is red, with black edges and tips: the naked skin between the bill and the eyes is also of the latter colour: in the wild swan this bare space is yellow.

The manners and habits are much the same in both kinds, particularly when they are in a wild state; for indeed this species cannot properly be called domesticated; they are only as it were partly reclaimed from a state of nature, and invited by the friendly and protecting hand of man to decorate and embellish the artificial lakes and pools which beautify his pleasure grounds. On these the swan cannot be accounted a captive, for he enjoys all the sweets of liberty. Placed there, as they are the largest of all the British birds, so are they to the eye the most pleasing and elegant.

The swan, although possessed of the power to rule, yet molests none of the other water birds, and is singularly social and attentive to those of his own family, which he protects from every insult. While they are employed with the cares of the young brood, it is not safe to approach near them, for they will fly upon any stranger, whom they often beat to the ground by repeated blows, and they have been known by a stroke of the wing to break a man's leg. But, however powerful they are with their wings, yet a slight blow on the head will kill them.

The swan for ages past has been protected on the Thames as royal property, and it continues at this day to be accounted felony to steal their eggs. By this means their increase is secured, and they prove a delightful ornament to that noble river. Latham says, in the reign of Edward IV. the estimation they were held in was such, that no one who possessed a freehold of less than the clear yearly value of five marks, was permitted even to keep any. In those times hardly a piece of water was left unoccupied by these birds, as well on account of the gratification they gave to the eye of their lordly owners, as that which they also afforded when they graced the sumptuous board at the splendid feasts of that period; but the fashion of those days is passed away, and swans are not nearly so common now as they were formerly, being by most people accounted a coarse kind of food, and consequently held in little estimation; but the cygnets (so the young swans are called) are still fattened for the table, and are sold very high, commonly for a guinea each, and sometimes for more: hence it may be presumed they are better food than is generally imagined.

The female makes her nest, concealed among the rough herbage, near the water's edge; she lays from six to eight large white eggs, and sits on them about six weeks (some

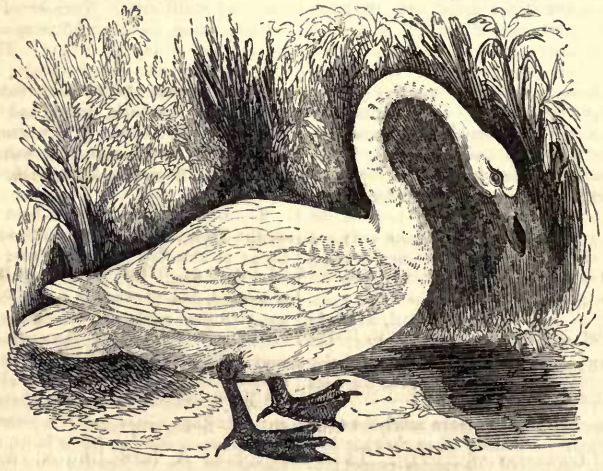
say eight weeks) before they are hatched. The young do not acquire their full plumage till the second year.

It is found by experience that the swan will not thrive if kept out of the water; confined in a court-yard he makes an awkward figure, and soon becomes dirty, tawdry, dull, and spiritless.

At the setting in of frosty weather the wild swans are said to associate in prodigious multitudes, and thus united, to use every effort to prevent the water from freezing: this they accomplish by the continual stir kept up amongst them; and by constantly dashing it with their extended wings, they are enabled to remain as long as it suits their convenience, in some favourite part of a lake or river which abounds with their food.

The swan is very properly entitled the peaceful monarch of the lake: conscious of his superior strength, he fears no enemy, nor suffers any bird, however powerful, to molest him; neither does he prey upon any one. His vigorous wing is as a shield against the attacks even of the eagle, and the blows of it are said to be so powerful as to stun or kill the fiercest of his foes. The wolf or the fox may surprise him in the dark, but their efforts are vain in the day. His food consists of the grasses and weeds, and the seeds and roots of plants which grow on the margin of the water, and of the myriads of insects which skim over, or float on its surface; also occasionally of the slimy inhabitants within its bosom.

The female makes her nest of the withered leaves and stalks of reeds and rushes, and lays commonly six or seven thick-shelled white eggs: she is said to sit upon them six weeks before they are hatched. Both male and female are very attentive to their young, and will suffer no enemy to approach them.



Wild Swan. (*Anas Cygnus ferus*, Linn.; *Le Cygne Sauvage*, Buff.)—Measures five feet in length, and above seven in breadth, and weighs from thirteen to sixteen pounds. The bill is three inches long, of a yellowish white from the case to the middle, and thence to the tip, black; the bare space from the bill over the eye and eyelids is yellow; the whole plumage in adult birds is of a pure white, and, next to the skin, they are clothed with a thick fine down; the legs are black.

This species generally keep together in small flocks, or families, except in the pairing season, and in the setting in of winter. At the latter period they assemble in immense multitudes, particularly on the large rivers and lakes of the thinly inhabited northern parts of Europe, Asia, and America: but when the extremity of the weather threatens to become insupportable, in order to shun the gathering storm, they shape their course high in air, in divided and diminished numbers, in search of milder climates. In such seasons they are not uncommonly seen in various parts of the British isles, and in other more southern countries of Europe. The same is observed of them in the North American states. They do not, however, remain longer than till the approaching of the spring, when they again retire northward to the arctic regions to breed. A few, indeed, drop

short, and perform that office by the way, for they are known to breed in some of the Hebrides, the Orkney, Shetland, and other solitary isles; but these are hardly worth notice: the great bodies of them are met with in the large rivers and lakes near Hudson's Bay, and those of Kamtschatka, Lapland, and Iceland. They are said to return to the latter place in flocks of about a hundred at a time in the spring, and also to pour in upon that island from the north, in nearly the same manner, on their way southward in the autumn.

Swan-Goose. (*Anas Cygnoides*, Linn.; *L'Oie de Guinée*, Buff.)—This species is more than a yard in length, and is of a size between the swan and the common-goose; it is distinguished from others of the goose tribe by its upright and stately deportment, by having a large knob on the root of the upper mandible, and a skin, almost bare of feathers, hanging down like a pouch, or a wattle, under the throat; a white line or fillet is extended from the corners of the mouth over the front of the brow; the base of the bill is orange; irides reddish-brown; a dark-brown or black stripe runs down the hinder part of the neck, from the head to the back; the fore part of the neck, and the breast, are yellowish-brown; the back, and all the upper parts, brownish-grey, edged with a lighter colour; the sides, and the feathers which cover the thighs, are clouded with nearly the same colours as the back, and edged with white; belly white; legs orange.

It is said that these birds originally were found in Guinea only; the breed has, however, now become pretty common, and they are widely dispersed, in a wild as well as a domesticated state, over various parts of the world, both in warm and in cold climates.

They are found wild about the lake Baikal, in the east of Siberia, and in Kamtschatka; and they are kept tame in most parts of the Russian empire.

These geese, like others of the tame kind, vary much both in colour of the bill, legs, and plumage, as well as in size; but they all retain the knob on the base of the upper mandible, and the pouch or wattle under the gullet.

They are kept by the curious in various parts of England, and are more noisy than the common goose; nothing can stir either in the night or in the day, without their sounding the alarm, by their hoarse cacklings, and loud shrill cries. They breed with the common goose, and their offspring are as prolific as those of any other kind. The female is of a smaller size than the male; the head, neck, and breast are fulvous; paler on the upper part; the back, wings, and tail, dull brown, with pale edges; belly white; in other respects they are like the male, but the knob over the bill is smaller.—*Bewick.*

Sward, *s.* The skin of bacon; the surface of the ground.

Swarm, *s.* A great body or number of bees or other small animals; a multitude, a crowd.

Swart or Swarth, *a.* Black, darkly brown, tawny.

Sweepnet, *s.* A net that takes in a great compass.

Sweepstake, *s.* A man that wins all; a prize at a race.

Swift, *a.* Moving far in a short time, quick, fleet, speedy.

Swift, (*Cypselus murarius*, Temminck,) *s.* A bird like a swallow.

This species is nearly an ounce in weight: length near eight inches: breadth about eighteen; the bill is black; irides dusky; the whole plumage is black, except the chin, which is whitish; the wings are extremely long in proportion, and the legs so short that it rises from the ground with difficulty; the tail is forked; legs and toes black. It has four toes, all placed forward. In this particular it deviates from one of the characters of the swallow genus.

In very warm weather these birds soar to a great height, but in cold or moist weather fly low in search of flies and other winged insects, which at that time cannot ascend.—*Montagu.*

Swiftness, *s.* Speed, rapidity, velocity.

Swim, *v.* To float on the water, not to sink; to move progressively in the water by the motion of the limbs; to be conveyed by the stream; to glide along with a smooth or dizzy motion; to be dizzy.

An accidental fall into water may be most dangerous to those ignorant of the art of swimming, by observing the directions here given, a person may save himself from drown-

ing. If he falls into deep water, he will rise to the surface by floating, and will continue there if he does not elevate his hands, and the keeping them down is essential to his safety. If he moves his hands under the water, in any way he pleases, his head will rise so high as to allow him free liberty to breathe. And if, in addition, he moves his legs exactly as in the action of walking up stairs, his shoulders will rise above the water, so that he may use less exertion with his hands, or apply them to other purposes.

Swimming of Birds.—The superior velocity with which aquatic birds swim under water has not wholly escaped notice; but it is not entirely produced by the action of the wings, which are sometimes used as fins to accelerate the motion, but is occasioned by the pressure of the water above. In swimming on the surface a bird has two motions; one upward, the other forward, at every stroke of the feet; so that when covered with water, that force which was lost by the upward motion is all directed to the progressive, by which it is enabled to pursue its prey, or to escape an enemy with incredible speed. The otter and water rat swim much faster under water than they do upon the surface.—*Montagu.*

SWINE, *s.* A hog, a pig, a sow.

SWOOP, *v.* To fall at once as a hawk upon its prey; to prey upon; to catch up.

SWOOP, *s.* Fall of a bird of prey upon his quarry.

SYCAMORE, *s.* A tree.

SYLVAN, *a.* Woody, shady.

SYLVIA (LATHAM), *s.* Warbler, a genus thus characterised:—

Bill slender, rather awl-shaped, and straight; but with the point of the upper mandible slightly bent and notched; lower mandible straight; base more high than broad; nostrils at the sides of the base oval, and partly covered with a membrane: legs having the shank longer than the middle toe; toes three before and one behind, the outer toe being joined at its base to the middle one; wings with the first quill very short, sometimes indeed wanting; the second and third nearly of equal length; wing coverts and scapulars short.—*Montagu.*

SYMPATHETIC, *a.* Having mutual sensation, being affected by what happens to the other.

SYMPATHY, *s.* Fellow feeling, mutual sensibility, the quality of being affected by the affection of another.

Animals which are unable to associate with their own species will sometimes form most strange attachments. I had last year a solitary pigeon, who, being unable to procure a mate, attached itself to an old barn-door fowl, whose side it seldom left at night, roosting by him in the hen-house. The cock seemed sensible of the attachment of the pigeon, and never molested it, or drove it from him.

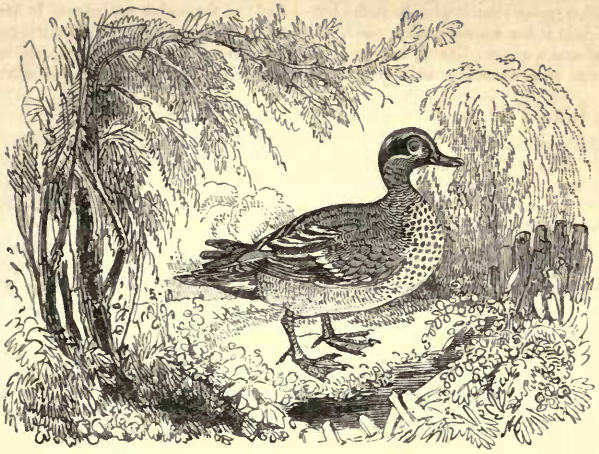
At Aston Hall, in Warwickshire, I remember to have seen a cat and a large fierce blood-hound, who were always together, the cat following the dog about the yard, and never seeming tired of his society. They fed together, and slept in the same kennel.

Some animals of the same species form also strong attachments for each other. This was shown in the case of two Hanoverian horses, who had long served together during the peninsular war, in the German brigade of artillery. They had assisted in drawing the same gun, and had been inseparable companions in many battles. One of them was at last killed; and after the engagement the survivor was picqueted as usual, and his food brought to him. He refused, however, to eat, and was constantly turning round his head to look for his companion, sometimes neighing, as if to call him. All the care that was bestowed upon him was of no avail. He was surrounded by other horses, but he did not notice them; and he shortly afterwards died, not having once tasted food from the time his former associate was killed. A gentleman who witnessed the circumstance assured me that nothing could be more affecting than the whole demeanour of this poor horse.—*Jesse.*

SYMPTOMATIC, *a.* Happening concurrently; betokening.

SYRINGE, *s.* A pipe through which any liquor is squirted.

SYRINGE, *v.* To spout by a syringe; to wash with a syringe.



THE TEAL.

TABBY, *a.* Brinded, brindled; term applied to a cat.

TADPOLE, *s.* A young shapeless frog or toad, consisting only of a body and a tail.

TAGTAIL, *s.* A worm which has the tail of another colour.

TAIL, *s.* That which terminates the animal behind, the continuation of the vertebræ of the back hanging loose behind; the lower part; the hinder part of anything; *to turn tail,* to run away.

When a dog is cropped, it is usual also to cut off a portion of the tail. Dog fanciers, as they are termed, commonly bite it off; but it were to be wished that a larger portion was added to both their knowledge and humanity. The tail does not grow materially after cutting, therefore the length may be previously determined on with sufficient accuracy, and cut off with a pair of sharp scissors. If the ears and tail are cut off at the same time, it is prudent to tie a ligature about the tail, to prevent the effusion of blood, as sometimes the bleeding, from both ears and tail together, will weaken the animal too much, and early distemper may follow; but when the tail alone is cut, no ligature is necessary. When a ligature is used, neither tie it too tight, nor suffer it to remain more than twelve hours. On the twisting off either the ears or tail, I will waste no invective; for if the cruelty does not strike the performer, I am sure no assertion of mine, that it is far inferior in every point of view to excision, and has for ever deafened many it has been practised on, will be attended to.—*Blaine.*

TALLOW, *s.* The grease or fat of an animal, suet.

TALON, *s.* The claw of a bird of prey.

TAME, *a.* Not wild, domestic; crushed, subdued, depressed, spiritless, unanimated.

TAME, *v.* To reduce from wildness, to reclaim, to make gentle; to conquer.

TAN, *v.* To impregnate or imbue with bark; to imbrown by the sun.

TAN, *s.* A dark brown colour; the marks of a terrier.

TANSY, *s.* A plant.

This plant grows abundantly about the borders of fields; it has a strong bitter taste, and rather a pleasant odour. It may be employed in the form of a decoction as a vehicle for tonic or stomachic medicines. It has been said to possess an anthelmintic quality, but I believe there is no foundation for this opinion. It is used also in fomentations.—*White.*

TAR, *s.* Liquid pitch.

Tar Ointment.—This is a good remedy for thrushes, and other diseases of the frog. It appears to promote the growth of horn by gently stimulating the secretory vessels of that part.

The rotten parts of the frog having been carefully removed with a knife, and the rest well cleansed, the tar is to be melted and poured into the cleft or cavity; a pledget of tow is then to be laid on the part, and confined by some proper contrivance. In bad cases a small proportion of sulphuric acid should be carefully mixed with the tar; and when a thrush has degenerated into the disease termed canker, a larger proportion of the acid should be employed.

Tar mixed with oil of turpentine and cantharides forms a strong blister. Farriers sometimes employ tar as a remedy for cough; but it more frequently aggravates than relieves the complaint.

Tar, when mixed with verdigris, or finely powdered blue, or white vitriol, forms a good liniment or ointment for canker or thrushes. It may be occasionally employed also with alum. Tar is an excellent stopping for flat thin soles, mixed with tallow: in the latter form it makes a good hoof ointment, and when rubbed about the coronet and hoof, is said to render the hoof tough.—*White.*

TARGET, *s.* A kind of buckler or shield borne on the left arm.

TARPAWLING, *s.* Hempen cloth smeared with tar.

TARRIER, *s.* A sort of small dog that hunts the fox or otter out of his hole. In this sense it ought to be written and pronounced Terrier, which see.

TEAL (*Anas Crecca*, LINN.; *La Petite Sarcelle*, BUFF.), *s.* A wild fowl.

This beautiful little duck seldom exceeds eleven ounces in weight, or measures more, stretched out, than fourteen inches and a half in length, and twenty-three and a half in breadth.

The bill is a dark lead colour, tipped with black; irides pale hazel; a glossy bottle green patch, edged on the upper side with pale brown, and beneath with cream-coloured white, covers each eye, and extends to the nape of the neck: the rest of the head, and the upper part of the neck, are of a deep reddish chestnut, darkest on the forehead, and freckled on the chin and about the eyes with cream-coloured spots: the hinder part of the neck, the shoulders, part of the scapulars, sides under the wings, and lower belly, towards the vent, are elegantly pencilled with black, ash-brown, and white tranverse waved lines; the breast, greatly resembling the beautifully spotted appearance of an India shell, is of a pale brown or reddish yellow, and each feather is tipped with a roundish heart-shaped black-spot: the belly is a cream-coloured white: back and rump brown, each feather edged with a pale colour: vent black: the primary quills, lesser and greater coverts, are brown; the last deeply tipped with white, which forms a bar across the wings; the first six of the secondary quills are of a fine velvet black; those next to them, towards the scapulars, are of a most resplendent glossy green, and both are tipped with white, forming the divided black and green bar or beauty spot of the wings.

The tail consists of fourteen feathers, of a hoary brown colour; with pale edges: the legs and feet are of a dirty lead colour. The female, which is less than the male, is prettily freckled about the head and neck with brown and white. She has not the green patch behind the eyes, but a brown streak there, which extends itself to the nape of the neck; the crown of the head is dark brown; the upper mandible yellow on the edges, olive green on the sides, and olive brown on the ridge; nail black, and the under bill yellow; breast, belly, and vent glossy yellowish white, spotted on the latter parts with brown; the upper plumage is dark brown, each feather bordered with rusty brown, and edged with grey: the wings and legs nearly the same as those of the male.

The teal is common in England in the winter months, but it is uncertain whether or not they remain throughout the year to breed, as is the case in France. The female makes a

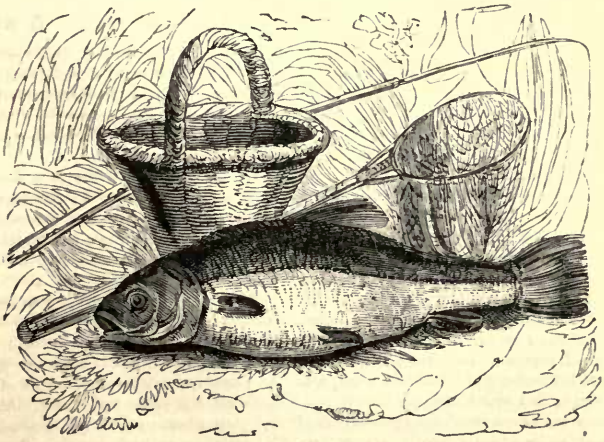
large nest, composed of soft dried grasses, (and, it is said, the pith of rushes) lined with feathers, cunningly concealed in a hole among the roots of reeds and bulrushes near the edge of the water, and some assert that it rests on the surface of the water, so as to rise and fall with it. The eggs are of the size of those of a pigeon, six or seven in number, and of a dull white colour, marked with small brownish spots; but it appears that they sometimes lay ten or twelve eggs, for Buffon remarks that that number of young ones are seen in clusters on the pools, feeding on cresses, wild chervil, &c., and no doubt, as they grow up, they feed, like other ducks, on the various seeds, grasses, and water plants, as well as upon the smaller animated beings with which all stagnant waters are so abundantly stored. The teal is highly esteemed for the excellent flavour of its flesh: it is known to breed, and remain throughout the year in various temperate climates of the world, and is met with as far northward as Iceland in the summer. * *

Of all the prizes that a wildfowl shooter could wish to meet with, a flock of teal is the very first. Independently of their being by far the best birds of the whole anas tribe, they are so much easier of access, and require such a slight blow, that no matter whether you are prepared for wild fowl, partridges, or snipes, you may at most times with very little trouble contrive to get near them; and this being once done, you have only to shoot straight to be pretty sure of killing.

I have seen teal "duck the flash," though never but once, and then I had rather a slow shooting gun.

If you spring a teal, he will not soar up and leave the country like a wild duck, but most probably keep along the brook, like a sharp flying woodcock, and then drop suddenly down; but you must keep your eye on the place, as he is very apt to get up again and fly to another before he will quietly settle. He will frequently, too, swim down the stream the moment after he drops, so that if you do not quickly cast your eye that way, instead of continuing to look for him in one spot, he will probably catch sight of you and fly up, while your attention is directed to the wrong place. If the brook in which you find him is obscured by many trees, you had better direct your follower to make a large circle, and get a head of, and watch him, in case he should slily skim away down the brook, and by this means escape from you altogether. You should avoid firing at random, as this may drive him quite away from your beat.—*Bewick—Hawker.*

Tench, *s.* A small pond-fish.



The tench is generally prized as a fine rich fish in England, but it is not so much esteemed on the continent: the Germans, in derision, call it the Shoemaker, They take red worms best in the spring; and gentles, not too much scoured, or sweet paste, in the hot months. Use a fine gut-line, quill-float, and No. 9 or or 10 hook; fish close to the bottom, and ground-bait with small pellets of bread, or chewed bread, or bread and bran mixed; or throw in about half-a-dozen gentles, or pieces of worms, frequently, close to your float. When the large tench take a bait, especially in still waters, they take or suck it in slowly, and generally draw the float straight down; strike immediately it disappears.

The tench will breed in rivers, lakes, and ponds, but they thrive best in those ponds where the bottom is composed of loamy clay, or mud, and in foul and weedy waters; they will sometimes bite very free all day in summer, during warm, close, dark weather, particularly while small, misty rain descends; at other times, only late in the evening, or early in the morning.—*Salter.*

TENDON, *s.* A sinew, a ligature by which the joints are moved.

TENNIS, *s.* A play at which a ball is driven with a racket.

A tennis court is usually ninety-six or ninety-seven feet long, by thirty-three or four in breadth. A net hangs across the middle, over which the ball must be struck, to make any stroke good. At the entrance of a tennis-court there is a long covered passage before the dedans, the place where spectators usually are, into which, whenever a ball is played, it counts for a certain stroke. This long passage is divided into different apartments, which are called galleries, viz. from the line towards the dedans, is the first gallery; door, second gallery; and the last gallery, is what is called the service-side. From the dedans to the last gallery are the figures, 1, 2, 3, 4, 5, 6, each at a yard distance, marking the chaces, one of the most essential parts of this game. On the other side of the line is the first gallery; door, second gallery; and last gallery, what is called the hazard-side; every ball played into the last gallery on this side tells for a certain stroke, the same as into the dedans. Between the second and this last gallery are the figures 1, 2, marking the chaces on the hazard-side. Over this long gallery is the pent-house, on which the ball is played from the service-side to begin a set of tennis, and if the player should fail striking the ball (so as to rebound from the pent-house) over a certain line on the service-side, it is reckoned a fault; and two such faults following are counted for a stroke. If the ball pass round the pent-house, on the opposite side of the court, and fall beyond a particular described line, it is called passe, goes for nothing, and the player is to serve again.

On the right hand of the court from the dedans, a part of the wall projects more than the rest, in order to make a variety in the stroke, and render it more difficult to be returned by the adversary, and is called the tambour: the grill is the last thing on the right hand, in which if the ball be struck, it is reckoned 15, or a certain stroke.

A set of tennis consists of six games, but if what is called an advantage set be played, two successive games above five games must be won to decide; or in case it should be six games all, two games must still be won on one side to conclude the set.

When the player gives his service in order to begin the set, his adversary is supposed to return the ball, wherever it falls after the first rebound, untouched; for example: if at the figure 1, the chace is called at a yard, that is to say, at a yard from the dedans; this chace remains till a second service is given, and if the player on the service side should let the ball go after his adversary returns it, and the ball fall on or between any one of these figures, they must change sides, for he will be then on the hazard-side to play for the first chace, which if he win by striking the ball so as to fall, after its first rebound, nearer to the dedans than the figure 1, without his adversary being able to return it from its first rebound, he wins a stroke, and then proceeds in like manner to win a second stroke, &c. If a ball fall on a line with the first gallery, door, second gallery, or last gallery, the chace is likewise called at such or such a place, naming the gallery, &c. When it is just put over the line, it is called a chace at the line. If the player on the service-side return a ball with such force as to strike the wall on the hazard-side, so as to rebound, after the first hop, over the line, it is also called a chace at the line.

The chaces on the hazard-side proceed from the ball being returned either too hard, or not hard enough: so that the ball, after its first rebound, falls on this side the line which describes the hazard-side chaces, in which case it is a chance at 1, 2, &c. provided there be no chace depending, and according to the spot where it exactly falls. When they change sides, the player, in order to win this chace, must put the ball over the line, any where, so that his adversary does not return it. When there is no chace on the hazard-side, all balls put over the line from the service-side, without being returned, reckon.

The game, instead of being marked one, two, three, four, is called for the first stroke, fifteen; for the second, thirty; for the third, forty; and for the fourth, game, unless the players get four strokes each; then, instead of calling it forty all, it is called deuce, after which, as soon as any stroke is got, it is called advantage; and in case the strokes become equal again, deuce again; till one or the other gets two strokes following, to win the game.

The odds at this game are very uncertain, on account of the chances: and various methods of giving odds have been used to render a match equal.

* * *

At the time when tennis play was taken up

seriously by the nobility, new regulations were made in the game, and covered courts erected, wherein it might be practised without any interruption from the weather. In the sixteenth century tennis-courts were common in England, and the establishment of such places countenanced by the example of the monarchs.

We have undoubted authority to prove that Henry VII. was a tennis player. In a MS. register of his expenditures made in the thirteenth year of his reign, and preserved in the remembrancer's office, this entry occurs:—"Item, for the king's loss at tennis, twelvepence; for the loss of balls, three-pence." Hence one may infer, that the game was played abroad, for the loss of the balls would hardly have happened in a tennis court. His son Henry, who succeeded him, in the early part of his reign was much attached to this diversion; which propensity, as Hall assures us, "being perceived by certayne craftie persons about him, they brought in Frenchmen and Lombards to make wagers with hym, and so he lost muche money; but when he perceyved theyr crafte, he eschued the company and let them go." He did not however give up the amusement, for we find him, according to the same historian, in the thirteenth year of his reign, playing at tennis with the Emperor Maximilian for his partner, against the prince of Orange and the marquis of Brandenborow: "the earl of Devonshire stopped on the prince's side, and the lord Edmond on the other side; and they departed even handes on both sides, after eleven games fully played."

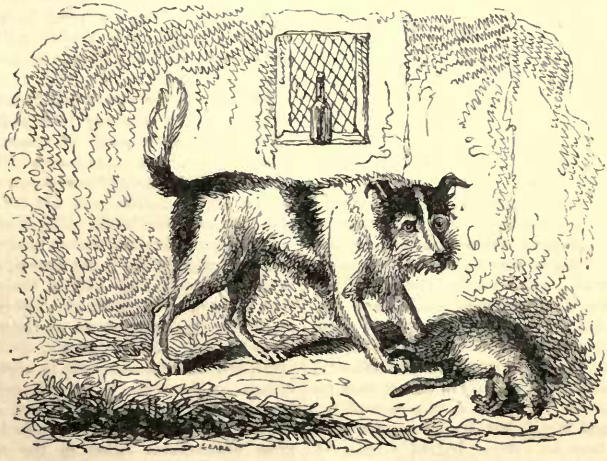
James I., if not himself a tennis player, speaks of the pastime with commendation, and recommends it to his son as a species of exercise becoming a prince. Charles II. frequently diverted himself with playing at tennis, and had particular kind of dresses made for that purpose. So had Henry VIII. In the wardrobe rolls we meet with tenes-cotes for the king, also tennis-drawers and tennis-slippers.

A French writer speaks of a damsel Margot, who resided at Paris in 1424, and played at hand-tennis with the palm, and also with the back of her hand, better than any man; and what is most surprising, adds my author, at that time the game was played with the naked hand, or at best with a double glove.—*Hoyle*—*Strutt.*

TENT, *s.* A soldier's movable lodging place, commonly made of canvass extended upon poles; any temporary habitation, a pavilion; a roll of lint put into a sore; a species of wine deeply red.

TEREBINTHINE, *a.* Consisting of turpentine, mixed with turpentine.

TERRIER, *s.* A dog that follows his game underground.



The Scotch Terrier. (*Canis terrarius, variety, a.*)—It is now impossible to trace the origin of the terrier, but from the many characteristics peculiar to itself, we would

almost be induced to consider it a primitive race. Certain it is, that this dog has been for many ages assiduously cultivated and trained to the particular sports to which nature seems to have so well adapted him. To the fox, hare, rabbit, badger, polecat, weasel, rat, mouse, and all other kinds of vermin, he is a most implacable enemy; he has also a strong natural antipathy to the domestic cat.

The name terrier seems to be derived from the avidity with which he takes the earth in pursuit of all those animals which burrow.

There are two kinds of terriers,—the rough haired Scotch and the smooth English.

The Scotch terrier is certainly the purest in point of breed, and the English seems to have been produced by a cross from him.

The Scotch terrier is generally low in stature, seldom more than twelve or fourteen inches in height, with a strong muscular body and short and stout legs; his ears small and half pricked; his head is rather large in proportion to the size of his body, and the muzzle considerably pointed; his scent is extremely acute; so that he can trace the footsteps of all other animals with certainty; he is generally of a sand colour or black; dogs of these colours are certainly the most hardy, and more to be depended upon; when white or pied, it is a sure mark of the impurity of the breed. The hair of the terrier is long, matted, and hard, over almost every part of his body. His bite is extremely keen.

There are three distinct varieties of the Scotch terrier, viz. the one above described; another about the same size as the former, but with the hair much longer and somewhat flowing, which gives his legs the appearance of being very short. This is the prevailing breed of the western islands of Scotland. The third variety is much larger than the former two, being generally from fifteen to eighteen inches in height, with the hair very hard and wiry, and much shorter than that of the others. It is from this breed that the best bull-terriers have been produced.

The terrier, amongst the higher order of sportsmen, is preserved in its greatest purity, and with the most assiduous attention; and it seems of the utmost importance not to increase its size, which would render him unsuitable for the purpose in which he is employed, that of entering the earth to drive out other animals from their burrows, for which his make, strength, and invincible ardour, peculiarly fit him. On this account he is the universal attendant upon a pack of fox hounds, and though last in the pursuit he is not the least in value. Indeed a brace of these dogs is considered indispensable in a complete fox-hunting establishment, and they are generally of different sizes, so that the smallest may enter an earth which will not admit the other. As soon as the hounds are thrown into covert, the terrier becomes the busiest in the field when endeavouring to find the fox; whenever the game is started, and the hounds running breast high, and at their utmost speed, this active little animal is seldom far behind, and is sure to be up at the first check. It is when the fox is supposed to have earthed, that the services of the terrier are most essentially required; he enters with the utmost eagerness, and soon informs the ear of the sportsman whether or not he is in, and at what distance from the mouth, when he is speedily dug out.

The principal objection to the reddish coloured terrier in a pack is, that by juvenile sportsmen, in the clamour of the chase, they are frequently hallooed off for a fox.

The English Terrier. (*Canis terrarius, variety β.*)—This is a handsome sprightly dog, and generally black on the back, sides, and upper part of the head, neck, and tail; the belly and the throat are of a very bright reddish brown with a spot of the same colour over each eye. The hair is short and somewhat glossy; the tail rather truncated, and carried slightly upwards; the ears are small, somewhat erect, and reflected at the tips; the head is little in proportion to the size of the body, and the snout is moderately elongated. This dog, though but small, is very resolute, and is a determined enemy to all kinds of game and vermin, in the pursuit and destruction of which he evinces an extraordinary and untaught alacrity. Some of the larger English terriers will even draw a badger from his hole. He varies considerably in size and strength, and is to be met with from ten to eighteen inches in height.

This dog, or the wire-haired Scotch terrier, is indispensably necessary to a pack of fox-hounds, for the purpose of unearthing the game. From the greater length of leg, from his general lightness, and the elegant construction of his body, he is more adapted for running, and of course better enabled to keep up with the pack than the Scotch terrier.

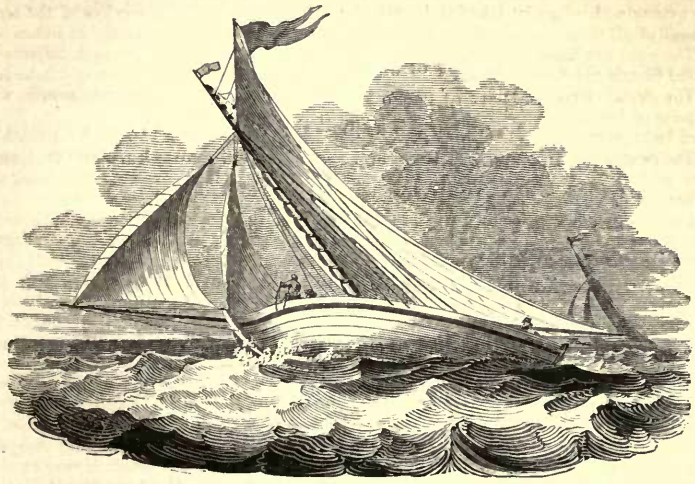
Mr. Daniel, in his Rural Sports, mentions a match against time with a terrier, which took place in 1794, in which a small dog ran six miles: the first mile in two minutes, the second in four, the third in six, the fourth in eight, and the fifth and sixth in eighteen minutes,—an immense falling off, considering his wonderful speed, and the known stoutness of the terrier. We doubt there has been some unsteadiness either in the watch or watch-holder. He afterwards ran six miles in thirty-two minutes.—*Brown.*

TESTACEA, *s.* Shell-fish, the third order of the class Vermes.

Testaceous, *a.* Consisting of shells, composed of shells; having continuous, not jointed shells, opposed to crustaceous.

Tether, *s.* A string by which cattle are held from pasturing too wide.

Thames' Yachts, *s.* Small vessels of pleasure used by members of the river clubs.



The sailing clubs upon the Thames, comprise the Royal Sailing Society—the Royal Thames' Yacht-club—the Clarence—British—Royal Yacht, and several minor associations. Throughout the season several cups and prizes are annually given; and the severe and spirited contests between the beautiful small craft which form these fancy fleets, are highly interesting.

The sailing matches on the river are divided into two classes—one above, and the other below the bridges. The smaller yachts, ranging from six to twenty-six tons, are commonly entered for the former, while a larger class contend for prizes sailed for between Greenwich and Gravesend.

These elegant and truly national amusements, appear to be rapidly gaining a prominent place in the list of fashionable recreations; and aquatic sports now occupy that dull and sombre season, from the period hunting ends, till russet autumn summons the sportsman to the field.

Thigh, *s.* The thigh includes all between the buttock and the knee.

Thill, *s.* The shafts of a wagon.

Thillhorse or Thiller, *s.* The last horse that goes between the shafts.

Thirst, *s.* The pain suffered for want of drink, want of drink; eagerness, vehement desire.

Thoroughpin, *s.* A swelling of the capsular ligament attendant on bog spavin.

There are placed in the neighbourhood of joints certain bags, containing a mucous fluid for the purpose of lubricating the parts, and these sometimes become inflamed and enlarge.

A similar enlargement is found above the hock, between the tendons of the flexor of the foot, and the extensor of the hock. As from its situation it must necessarily project on both sides of the hock, in the form of a round swelling, it is called a thorough-pin. It is an indication of considerable work, but, except it be of very great size, it is rarely attended by lameness. The mode of treatment must resemble that recommended for wind-galls. Although thorough-pin cannot be pronounced to be unsoundness, yet it behoves the buyer to examine well a horse with thoroughpin, and to ascertain whether undue work may not have injured him in other respects.—*The Horse.*

THOWL, *s.* The pin or piece of timber by which the oar is kept steady in rowing.

THRAPPLE, *s.* The windpipe of any animal.

THROAT, *s.* The forepart of the neck; the main road of any place.

THROSTLE, *s.* A species of thrush, a small singing bird. It is said to have the breast darker and the tail shorter than this bird; but there are not sufficient grounds to believe it is distinct from the thrush.

THROTTLE, *s.* The windpipe.

THROTTLE, *v.* To choke.

THROUGHBRED, *a.* Completely educated, completely taught; in sporting parlance, applied to racehorses of unblemished pedigree.

THROW, *v.* To perform the act of casting; to cast dice; to cast a horse.

Horses are thrown down by means of hobbles. The hobble is about two feet in length, two inches and five-eighths in width, and about a quarter of an inch thick. It is formed by a strong piece of leather, about four feet in length, which, being doubled, has a strong iron buckle included at one end, and firmly sewed in. About four inches and a half further back, a large iron ring is to be sewed in, in the same manner, for the purpose of allowing a strong rope to pass through it easily. The ring, or rather the part so named, may be made straight where it is sewed into the leather, and the rest may be rounded. The remaining part of the leather is to be strongly sewed together, which will make the thickness of it what we have before described. Several holes are to be punched at this end of the hobble, to admit the tongue of the buckle when it is put round the horse's leg. On the under side of the hobble, a piece of thinner and wider leather is to be fixed, extending from the part where the ring is attached to about half an inch beyond the extremity of the buckle; this is intended to prevent the latter from galling the horse's leg. The rope should be strong, not twisted tight, but made flexible, like a bell-rope, and about six yards in length. One end of the rope is to be firmly and permanently attached to the ring of one of the hobbles, and this hobble must be placed on the fore-leg, opposite to the side on which the horse is to be thrown. If the hobble to which the rope is attached is placed on the left fore-leg, the other end of the rope is to be passed first through the ring of that on the left hind-leg, then through that on the right hind-leg, next through that on the right fore-leg, and lastly, through the ring, where the rope is attached, that is, the left fore-leg hobble.

By this contrivance it will be readily seen that the legs of the horse may be drawn together, so that if pushed or forced towards the right side, he must of necessity fall. Three men are generally required to pull the rope, in order to draw the legs together; and to render this more easy, the hind-legs should be placed under him as much as possible before any attempt is made to pull the rope. The horse should have blinds, or have his eyes covered with a piece of rug, before the hobbles are put on; it may be necessary, also, to twitch him, and hold up the fore-leg while the hind-leg hobble is putting on. But the twitch must be removed before he is thrown, and not used unless absolutely necessary. The men who are to pull the rope should stand within two yards of the horse, as they then pull with double the force they would at a distance of four yards, their power then having a tendency to draw the legs off the ground, and upwards, which causes him to fall more quickly. One man should stand at the rump, on the left side, to push him when the legs are drawn up together; and one man should hold him steadily by the head, standing in front of him; and as soon as the horse is down, that

man should throw himself on the neck, and incline the nose upward, by lifting the halter; thus he can keep the head and neck down without difficulty.

M. Girard, in his Traité du Pied, has proposed an improvement in throwing horses, which is very simple, and should always be employed: but it requires an additional assistant, or two would still be better. If the horse is to be thrown on the right side, a long piece of web, or a rope, is to be fastened round the right fore arm, close up to the elbow. The other end is then to be passed over the withers, and held at a little distance by one or two men. The force which is applied in this way will cause the horse to fall more readily, and with more certainty, and exactly in the situation where he is required to be thrown. This contrivance, therefore, is extremely useful in confined places, where there is just room enough to throw a horse, and no more. The horse being thrown down, and his legs closely drawn together, the end of the hobble rope is to be passed under the hobble rings, between the fore and hind legs, and secured with a hitch, as it is termed, so that he cannot separate them again until the hobbles are unbuckled, and then they all may be taken away at once, and the horse suffered to get up.

In letting the horse get up again, the hobbles must be unbuckled cautiously, beginning with the under fore and hind one. These should be unbuckled gently, and not jerked, as that would cause the horse to struggle, and render it difficult to take them off, or the leg might get loose, and he may thus hurt one of the assistants, who happens to be standing incautiously within the stroke of his fore or hind leg. I have seen hobbles in which the tongues were movable, so that by drawing them out with a pair of pincers the hobbles were all taken off at once.

In performing operations upon the horse, it is not only necessary to throw him down as I have described, but in firing the outside of the fore leg, for example, in the pastern, the hobble must be taken off, and the leg secured by means of a web passed round the leg above the knee, and secured to the upper hind leg, immediately above the hock, or it may be secured to the under fore leg; perhaps both these contrivances would be found useful in strong horses that struggle much. In firing the inside of the fore leg, that is, the under fore leg, nothing more is necessary than to take it out of the hobble, and draw it forwards by means of a web passed round the hoof, or the pastern.

Horses, however, have sufficient power to extend even the under fore leg considerably, unless a man lies on the shoulder, which should always be avoided. It is better to restrain the leg, by passing a web round it above the knee, and fastening the other end to the hind leg above the hock. If then the other three legs are drawn backward, by means of the hobble rope, the under fore leg will be sufficiently exposed for any operation that may be required. In firing the upper hind leg in the pastern, it is necessary to take off the hobble; but the leg must first be secured by means of a web, fastened above the hock, and the other end brought forward, and, under a collar of web, passed round the neck, close to the shoulder. The leg may thus be effectually restrained; but, as an additional restraint, it may be tied also to the under hind leg.—*White.*

Thrush, Throstle, Grey Bird, or Mavis, (*Turdus musicus*, Linn.; *La Grive*, Buff.) *s.* A small singing bird.

This is larger than the redwing, but much less than the missel, to which it bears a strong resemblance both in form and colours. A small notch is observable at the end of the bill, which belongs to this and every bird of the thrush kind; the throat is white, and the spots on the breast more regularly formed than those of the missel thrush, being of a conical shape; the inside of the wings and the mouth are yellow, as are also the legs; the claws are strong and black.

The throstle is distinguished among our singing birds by the clearness and fulness of its note; it charms us not only with the sweetness, but variety of its song; which it begins early in the spring, and continues during part of the summer. This bold and pleasing songster, from his high station, seems to command the concert of the grove, whilst in the beautiful language of the poet,

"The jay, the rook, the daw,
And each harsh pipe (discordant heard alone)
Aid the full concert, while the stock-dove breathes
A melancholy murmur through the whole."

The female builds her nest generally in bushes; it is composed of dried grass, with a little earth or clay intermixed, and lined with rotten wood; she lays five or six eggs of a pale-blue colour, marked with dusky spots. Although this species is not considered with us as migratory, it has, nevertheless, been observed in some places in great numbers dur-

ing the spring and summer, where not one was to be seen in the winter, which has induced an opinion that they either shift their quarters entirely, or take shelter in the more retired parts of the woods. The throstle is migratory in France. M. de Buffon says that it appears in Burgundy about the end of September, before the redwing and fieldfare, and that it feeds upon the ripe grapes, and sometimes does much damage to the vineyard. The females of all the thrush kind are very similar to the males, and differ chiefly in a less degree of brilliancy in the colours. * *

Opposite my study windows at Lee, I observed last summer, a missel thrush fly boldly at a carrion-crow, and persecute him with bill and wing till he seemed glad to leave the field. This, however, is far outdone by the account M. Le Vaillant gives of a party of missel thrushes attacking and actually vanquishing an eagle. — *Bewick* — *Rennie* — *Montagu.*

THRUSH, *s.* Small, round, superficial ulcerations, which appear first in the mouth; they may affect every part of the alimentary duct, except the thick guts; a disease in a horse's foot.

This is a disease of the frog, causing a discharge of matter from its division or cleft, not often productive of lameness, especially in the hind feet, where it is always a consequence of negligence in the groom, in permitting a horse to stand in his dung, or upon foul wet litter. This softens and rots the horny frog, the putrid and acrid fluids penetrate through the soaked and rotten horn, and inflame the sensible frog, causing it to discharge a fetid acrimonious matter, instead of secreting horn for its own defence, as it does in the healthy state.

Thrushes in the fore-feet are sometimes occasioned by contraction of the heels, but more frequently by the horny box or hoof, considered all together, becoming too thick, and consequently inelastic. In this case, the blood is principally distributed to the sensible frog; the arteries that supply this not being liable to compression, being lodged in that elastic substance of fatty membrane and cartilage, of which the body of the sensible frog is composed. This Lafosse supposes to be destitute of nerves, and that its covering or skin only is endued with sensibility. I believe this opinion is correct; for in this part sensibility is not only unnecessary, but would be injurious. This part forms a very curious spring, and is constructed in a manner that is truly wonderful. It is composed of fatty matter and cartilage, which are so distributed, that the more the frog is compressed, the nearer the cartilages approach each other; thus the frog becomes denser and denser, while its elasticity increases in a similar ratio. When it is compressed to the greatest degree, the effect is imparted to the lateral cartilages, and these bodies impart it to the heels, and quarters or sides of the hoof, and thus it is that the motions of the hoof are produced. To admit of this motion of the hoof, which is the only one that takes place, the elastic membranes yield in a very slight degree, which diminishes from the heel to the toe, but is sufficient for the economy of the foot. The treatment of thrush must depend altogether upon the cause which produces it. When in the hind foot, and occasioned by filthiness, the cause must be removed, and then the disorder may cease; but this is not always the case, for the thrush sometimes has proceeded so far as to produce ulceration of the sensible frog, which then requires to be dressed with a solution of blue vitriol, or oxymel of verdigris. Before this is done, the cleft of the frog should be thoroughly cleansed to the bottom by means of tow; and if there is any ragged horn covering a diseased part, it should be completely removed. One of these dressings, when it is properly done, is sufficient for the cure. Some tar, or hoof-ointment, such as has been prescribed in the chapter on contracted heels, may be applied hot, to promote the regeneration of horn, and to defend it from moisture. In cases where the frog has become very tender or rotten, I have found it necessary to apply a mixture of tar and sulphuric acid, which is made by adding one ounce, by weight, of sulphuric acid to one pound of melted tar, and stirring the mixture for some time. As to the thrush in the fore-feet, the treatment is different. Here also the cause must be first removed, which is, an undue determination of blood to the frog, in consequence of the compression the sensible foot suffers from a contraction of the heels; or from a superabundance of horny matter generally in the crust, and often in the sole also. The motion which I have described as constantly going on in the hoof, will now appear to be an essential provision in that part; for the heels, as they contract, become deficient in, and at length totally lose, their elasticity. When the frog, under this circumstance, comes down upon the ground and receives pressure, the pain the animal feels from the ineffectual attempt thus made to expand the inelastic and inflexible heels, causes him to lift the frog a little, and go principally on the toe; hence the stumbling and falling so common in this case. This kind of thrush then is to be considered rather as useful than otherwise; and by attempting to stop it by those preparations

which are usually employed, the lameness is often increased. The only thing to be done is to rasp the heels and quarters, thin the soles, cover the frog with tar ointment, and wrap the foot in an emollient poultice; in slight cases, complete and permanent relief will be thus afforded. Should the thrush continue after the hoof has been well soaked with the poultice, and especially if the frog is very tender and rotten, apply the mixture of tar and sulphuric acid. Egyptiacum, either alone or with a small portion (a few drops to two ounces) of sulphuric acid, has been recommended. In old thrushes, physic may be useful, and some alterative medicine. Sometimes a run at grass is necessary in moist ground, and a horse may often be worked while he is thus kept. In bad cases, palliation only can be expected, unless a new hoof be obtained of a better kind, by rasping the quarters and thinning the sole, until spots of blood appear; and then, after stopping the feet with tar-ointment, turning the horse to grass.

Thrushes may happen in the fore-feet merely from filthiness, and may then be cured as they are in the hind-feet; but this is not a common occurrence.

The third kind of thrush I have to describe is not so common as the two former, and is no other than an incipient canker. It may always be cured by removing from the frog every bit of horn that is detached from the sensible frog, and by which a diseased part may be concealed, and then applying to the affected part a saturated solution of blue vitriol, or egyptiacum, with a few drops of sulphuric acid. Cleanliness must be carefully attended to; and when the disease of the frog has been cured, tar, or hoof-ointment, may be employed to promote the regeneration of horn.—*White.*

Tick, *s.* Score, trust; the case which holds the feathers of a bed; the louse of dogs or sheep.

To destroy ticks, rub the dogs over with oil. The oil operates by stopping up their spiracula, or breathing pores; a few drops of oil poured on a wasp so as to cover it, destroys it in a few seconds.—*Blaine.*

Tike, *s.* A species of dog.

Tilt, *s.* A tent, any covering over head; the cover of a boat; a military game at which the combatants run against each other with lances on horseback; a thrust. *Vide* Strutt.

Tin, *s.* One of the primitive metals, called by the chemists Jupiter.

This metal is a good anthelmintic in dogs; and though not employed in veterinary practice, appears to be worth a trial. I have known great numbers of worms discharged from dogs, by giving filings or scrapings of pewter, which is composed principally of tin and lead. The dose about a drachm. *Vide* Anthelmintics.—*White.*

Tincture, *s.* Colour or taste superadded by something; medical preparations made by infusing or digesting vegetables, &c. either in rectified or proof spirit.

Compound tincture of benzoin, commonly named Friar's, or traumatic balsam, is made by digesting gum benzoin, aloes, &c. in rectified spirit. Tincture of opium is made by digesting opium in proof spirit. There are also tinctures made with vinegar, such as squill and meadow saffron. Compound spirit of ammonia likewise is sometimes employed, as in the volatile tincture of guaiacum, and fœtid spirit of ammonia.—*White.*

Tinder, *s.* Anything eminently inflammable placed to catch fire.

Tinge, *v.* To impregnate or imbue with a colour or taste.

Tinsel, *s.* A kind of shining cloth; anything shining with false lustre, anything showy and of little value.

Tip, *s.* Top, point, end, extremity.

Tit, *s.* A small horse, generally in contempt; a woman, in contempt; a titmouse or tomtit, a bird.

TITLARK, *s.* A small bird; a name for the meadow pipit.

TITMOUSE, *s.* A small species of bird.

This diminutive tribe is distinguished by a peculiar degree of sprightliness and vivacity, to which may be added a degree of strength and courage which by no means agrees with its appearance. Birds of this class are perpetually in motion; they run with great celerity along the branches of trees, searching for their food in every little cranny, where the eggs of insects are deposited, which are their favourite food. During spring they are frequently observed to be very busy among the opening buds, searching for caterpillars, and are thus actively employed in preventing the mischiefs that would arise from a too great increase of those destructive insects, whilst at the same time they are intent on the means of their own preservation; they likewise eat small pieces of raw meat, particularly fat, of which they are very fond. None of this kind have been observed to migrate; they sometimes make short flittings from place to place in quest of food, but never entirely leave us. They are very bold and daring, and will attack birds much larger than themselves with great intrepidity.

These birds are very widely spread over every part of the old continent, from the northern parts of Europe to the Cape of Good Hope, as well as to the farthest parts of India, China, and Japan; they are likewise found throughout the vast continent of America, and in several of the West India islands. They are every where prolific, even to a proverb, laying a great number of eggs, which they attend with great solicitude, and provide for their numerous progeny with indefatigable activity.

All the titmice are distinguished by short bills, which are conical, a little flattened at the sides, and very sharp-pointed; the nostrils are small and round, and are generally covered by short bristly feathers, reflected from the forehead; the tongue seems as if cut off at the end, and terminated by short filaments; the toes are divided to their origin; the back toe is very large and strong.—*Bewick.*

TIVY, *a.* A word expressing speed, from tantivy, the note of a hunting-horn.

TOAD, *s.* An animal resembling a frog; but the frog leaps, the toad crawls; the toad is accounted venomous.

I remember some years ago getting up into a mulberry-tree, and finding in the fork of the two main branches a large toad almost embedded in the bark of the tree, which had grown over it so much, that he was quite unable to extricate himself, and would probably in time be completely covered over with the bark. Indeed, as the tree increased in size, there seems to be no reason why the toad should not in process of time become embedded in the tree itself, as was the case with the end of an oak rail that had been inserted into an elm-tree, which stood close to a public foot-path. This, being broken off and grown over, was, on the tree being felled and sawn in two, found nearly in the centre of it. The two circumstances together may explain the curious fact of toads having been found alive in the middle of trees, by showing that the bark having once covered them, the process of growth in the tree would annually convey the toad more nearly to the centre of it, as happened with the piece of oak-rail; and by showing that toads, and probably other amphibia, can exist on the absorption of fluids by the skin alone. This is confirmed by the following fact. A gentleman informed me that he put a toad into a small flower pot, and secured it so that no insect could penetrate into it, and then buried it in the ground at a sufficient depth to protect it from the influence of frost. At the end of twenty years he took it up, and found the toad increased in size, and apparently healthy. Dr. Townson, in his tracts on the respiration of the amphibia, proves, I think satisfactorily, from actual experiment, that, while those animals with whose economy we are best acquainted receive their principal supply of liquids by the mouth, the frog and salamander tribes take in theirs through the skin alone; all the aqueous fluid which they take in being absorbed by the skin, and all they reject being transpired through it. He found that a frog absorbed nearly its own weight of water in the short space of an hour and a half, and that by being merely placed on blotting-paper well soaked with water; and it is believed that they never discharge it, except when they are disturbed or pursued, and then they only eject it to lighten their bodies, and facilitate their escape. That the moisture thus imbibed is sufficient to enable some of the amphibia to exist without any other food, there cannot I think be a reasonable doubt; and if this is admitted, the circumstance of toads being found alive in the centre of trees is accounted for by this and the preceding facts related.

In additional proof however of what has been

advanced, I may mention that the respectable proprietor of some extensive coal-mines in Staffordshire, informed me that his men, in working into a stratum of thick coal at a very considerable depth, found three live eels in a small deposit of water in the centre of a block of coal, which died as soon as they were taken out of it. Another case was mentioned to me by an eminent physician. A wet spot had always been observed on a freestone mantel-piece, which afterwards cracked at that place, and upon its being taken down, a toad was found in it, dead; but its death was probably owing to the want of that moisture which it had been enabled to imbibe when the stone was in the quarry, and which gradually lessened by the action of the fire, as from the moisture which appeared on that part of the mantel-piece, some time after it was put up, there seems but little reason to doubt that the toad was alive at that time.

* * *

It is a curious fact that toads are so numerous in the island of Jersey, that they have become a term of reproach for its inhabitants, the word 'Crepaud' being frequently applied to them; while in the neighbouring island of Guernsey not a toad is to be found, though they have frequently been imported. Indeed, certain other islands have always been privileged in this respect. Ireland is free from venomous animals, of course by the aid of St. Patrick. The same was affirmed of Crete in olden times, being the birth place of Jupiter. The Isle of Man is said also to be free from venomous creatures. The Mauritius, and I believe one of the Balearic islands, enjoys the same immunity.—*Jesse.*

TOAST, *v.* To dry or heat at the fire; to name when a health is drunk.

TOD, *s.* A bush, a thick shrub; a certain weight of wool, twenty-eight pounds.

TOE, *s.* The divided extremities of the feet, the fingers of the feet.

TON, *s.* A measure of weight of twenty cwts.

TONIC, *a.* Being extended, being elastic; relating to tones or sounds; a medicine to strengthen the system.

Tonics, according to Murray, are those substances whose primary operation is to give strength to the system. Their operation is not mechanical, as was once conceived; they act not on the simple solids, increasing their tension or tone, but on the living fibre, and are merely powerful stimulants permanent in their operation. By producing a gradual excitement, they give vigour to the actions of the system, and as that excitement is gradually produced, it is in like manner gradually diminished, and the habitual stimuli continuing to operate, diminished action does not succeed. Where tonics however are given in excess, are used unnecessarily, or for too long a time, they weaken the powers of life.

Tonics may be divided into minerals and vegetables; the former are generally considered the most powerful, and I believe are at this time generally preferred, not only on account of their supposed superior efficacy, but likewise, probably, from their being less expensive, and the dose less bulky and inconvenient.

The following is the list of tonics given by Murray, as employed in veterinary medicine:

Tonics from the mineral kingdom.—Preparations of quicksilver or mercury; of iron; of zinc; of copper; of arsenic; of oxymuriate of potash.

From the vegetable kingdom.—Peruvian bark, pale, yellow, and red; Angostura bark; snake-root; contrayerva; canella alba; cascarilla; calumba; quassia; simarouba; gentian; camomile; wormwood; centaury; Seville orange peel; horehound. Minerals may be employed either separately, or in combination.

The following are examples:—

No. 1. Powdered arsenic from 5 to 10 gr.
Powdered aniseed . ½ oz.
Opium . . . ½ dr.
Treacle enough to form the ball.

No. 2. Arsenic . . from 5 to 10 gr.
Sulphate of copper . ½ dr.
Opium . . . ½ dr.
Powdered caraways . ½ oz.
Treacle enough to form the ball.

No. 3. Arsenic . . from 5 to 10 gr.
Opium . . . ½ dr.
Sulphate of zinc . 2 dr.
Caraway seeds . . ½ oz.
Treacle enough for the ball.

For the numerous formulæ of vegetable tonics *vide* WHITE, vol. ii.—*White.*

TOOTH, *s.* One of the bones of the mouth with which the act of mastication is performed; a tine, prong, a blade; the prominent part of wheels.

Decayed and tartared Teeth.—Sportsmen and persons living in the country, who are habituated only to healthy dogs, will smile at such a head line; but were they in London,

or other large cities and towns, where dogs are petted and immured in hot apartments night and day; where also they are gorged with the richest food, and are not exercised but in a carriage; and withal are probably descended from a long lineage of parents equally unnaturally treated; they would see sufficient of these effects of an imperfect digestion, to make them aware that this article is perfectly in place; and the remarks which follow are in unison with the general intention of these pages, to let nothing pass unnoticed, which a long and critical attention to the habits and diseases of these animals renders necessary to be guarded against and remedied. In the dogs I have described, nothing is more common to find than carious teeth, insufferably fœtid; others displaced, preventing mastication; or an immense accumulation of tartar, which covers them, erodes the gums, and makes the animal insufferably offensive. The veterinarian will often be called on to remedy these evils: the decayed teeth he must remove, and the displaced ones also; the tartaric deposit he must likewise completely scale off with proper dental instruments; for the accumulation is not only most unpleasant to the owners, but injurious to the dogs, by its septic tendency. and its invariably ending in the destruction of the teeth. The ulcerations are best removed by touching them with a mixture of a proper strength made from the solution of the chloride of soda with water: by the use of this, these ulcers will quickly heal; and the continuance of it will do much to remove the remaining fœtor, and stop the further deposit of tartar, particularly if coupled with a corresponding improvement in the general treatment of the animal.—*Blaine.*

TOOTHACH, *s.* Pain in the teeth.

I have been lately told by a friend, who rarely errs in his prescriptions, that the best cure for a toothach is,

One tablespoonful of rum,
Another of vinegar,
A teaspoonful of salt.

Mixed together and then held in the mouth. *Hawker.*

Nothing is more annoying in the mountains than an attack of this afflicting disease. Grouse shooters are particularly obnoxious to it, from unavoidable exposure to wet and sudden alterations of atmospheric temperature. I have known a sporting expedition embittered by this visitation, and as professional assistance was not procurable, the sufferer had no remedy but the old and slow one—patience. I recommend the worthy colonel's nostrum for two reasons; the first, that I believe it to be efficacious; and the second, that it is easily compounded.—*Ed.*

TOP, *s.* The highest part of anything; the surface, the superficies; the extreme joint of a fishing-rod.

TOPHEAVY, *a.* Having the upper part too weighty for the lower—a great defect in a fishing-rod.

TORCH, *s.* A wax-light bigger than a candle; any large or portable light.

TOUCHHOLE, *s.* The hole through which the fire is conveyed to the powder in a gun.

TOUCHWOOD, *s.* Rotten wood used to catch the fire struck from the flint.

TOW, *s.* Flax or hemp beaten and combed into a filamentous substance.

TRAIN, *v.* To draw along; to entice; to draw by artifice or stratagem; to educate, to bring up.

TRAIN, *s.* Artifice, stratagem of enticement, the tail of a bird; a line of powder reaching to the mine.

TRAINING, *p.* The act of putting into condition for racing, pugilism, or other violent exercises.

Training Racehorses.—A month is the least time that can be allowed to draw the horse's body clear, and to refine his wind to that degree of perfection that is attainable by art.

It is first necessary to take an exact view of his body, whether he be high or low in flesh, and it is also necessary to consider whether he be dull or heavy, or brisk and lively when abroad. If he appear dull and heavy and there is reason to suppose it is owing to too hard riding, or, as the jockeys express it,

to some grease that has been dissolved in exercise, and has not been removed by scouring, then the proper remedy is half an ounce of diapente, given in a pint of good sack; this will at once remove the cause, and revive the creature's spirits. After this, for the first week of the month, he is to be fed with oats, bread, and split beans, sometimes the one and sometimes the other, as he likes best, and always leaving some in the locker, that he may feed at leisure whilst left alone. At feeding time, whatever is left of this must be removed and fresh given, by these means the creature will soon become high-spirited, wanton, and full of play. Every day he must be rode out on airing, and every other day it will be proper to increase his exercise, but not so as to make him perspire too much. The beans and oats should be put in a bag, and beaten till the hulls are all off, and then winnowed clean, and the bread, instead of being chipped in the common way, should have the crust cut clean off. If the horse be in good health and in spirits, when taken up for its month's preparation the diapente must be omitted, and the chief business will be to give him good food, and so much exercise as will keep him in wind, without over-sweating or tiring him; when he takes larger exercise afterwards, towards the end of the month, it will be proper to have some horses to run against him. This will put him on his mettle, and the beating them will give him spirits: this, however, is to be cautiously observed, that he has not a blood heat (at full speed) given him for ten days or a fortnight before the race, and that the last heat that is given him the day before the race must be in his clothes, this will make him run with much more vigour, when stripped for the race, and feeling the cold wind on every part.

In the second week, the horse should have the same food, and more exercise. In the last fortnight, he must have dried oats, that have been hulled by beating. After this, they are to be wetted in a quantity of whites of eggs beaten up, and then laid out in the sun to dry, and when as dry as before the horse is to have them. This sort of food is very light of digestion, and very good for the creature's wind. The beans in this case should be given more sparingly, and the bread should be made of three parts wheat, and one part beans; if he should become costive, under this course, he must then have some ale and whites of eggs beaten together, this will cool him and keep his body moist. In the last week, the mash is to be omitted, and barley-water given him in its place every day until the day before the race; he should have his fill of hay at first, and then given more sparingly, that he may have time to digest it, and on the morning of the race-day he must have a toast or two soaked in sack, and the same just before he is let out to the field. This is an excellent method, because the two extremes of fullness and fasting are at this time to be equally avoided, the one hurting his wind, and the other occasioning faintness that may make him lose. After he has had his food, the litter is to be shook up, and the stable kept quiet that he may be disturbed by nothing till he is taken out to run.

* * *

The training of Jockeys.—John Arnall, when rider to his Royal Highness the Prince of Wales, was desired to reduce himself as much as he possibly could, to enable him to ride some favourite horse, without his carrying more weight than was agreed upon; in consequence of which, he abstained from animal and even farinaceous food for eight succeeding days, and the only substitute was now and then a piece of apple; he was not injured by it at the time, and is now in good health: added to which, Dennis Fitzpatrick, a person at this time continually employed as a rider, declares that he is less fatigued by riding, and has more strength to contend with a determined horse, in a severe race, when moderately reduced, than when allowed to live as he pleased, although he never weighs more than nine stone, and frequently has reduced himself to seven stone seven pounds.

* * *

REPLY TO SIR JOHN SINCLAIR'S QUERIES BY MR. SANDEVIR OF NEWMARKET.

How long does the training of jockeys continue?

With those in high repute as riders, in a greater or lesser degree, from about three weeks before Easter to the end of October, but a week or ten days are quite sufficient for a rider to reduce himself from the weight he is naturally of, to sometimes a stone and a half below it.

What food do they live on, both solid and liquid, and what quantities are allowed them of each?

For breakfast, a small piece of bread and butter, with tea, in moderation. Dinner is taken in a very sparing way, a very small piece of pudding, and less meat, and when fish is to be obtained, neither one nor the other are to be allowed; wine and water is their usual beverage, in the proportion of one part wine to two of water. Tea in the afternoon, with little or no bread and butter, and no supper.

What exercise do they get, and what hours of rest?

After breakfast, having sufficiently loaded themselves with clothes, that is, five or six waistcoats, two coats, and as many pair of breeches, a severe walk is taken, from ten to fifteen or sixteen miles; after their return

home, dry clothes are substituted for those that are made very wet and uncomfortable by sweat, and, if much fatigued, some of them will lie down for an hour before dinner; after which, no severe exercise is taken, but the remaining part of the day is spent in that way that may be most agreeable to themselves; they generally go to bed by nine o'clock, and continue there till six or seven the next morning.

Are they purged, and what purges and other medicines are given them?

Some of them that do not like excessive walking, have recourse to purgative medicines, two ounces of Glauber's salts is the usual dose, and it is very seldom that any other medicine is had recourse to.

Mr. Sandevir would recommend a similar process to reduce corpulency in either sex, as, from experience, he perceives, that the constitution does not appear to be injured by it, but he is apprehensive that hardly any person could be prevailed upon to submit to such severe discipline, that had not been inured to it from his infancy.

* * *

The art of training for athletic exercises consists in purifying the body and strengthening its powers by certain processes, which thus qualify a person for the accomplishment of laborious exertions. It was known to the ancients, who paid much attention to the means of augmenting corporeal vigour and activity; and accordingly among the Greeks and Romans certain rules of regimen and exercise were prescribed to the candidates for gymnastic celebrity.

The great object of training for running or boxing matches, is to increase the muscular strength and to improve the free action of the lungs or wind of the person subjected to the process, which is done by medicines, regimen, and exercise. That these objects can be accomplished is evident from the nature of the human system. It is well known (for it has been demonstrated by experiments) that every part of the firmest bones is successively absorbed and deposited. The bones and their ligaments, the muscles and their tendons—all the finer and all the more flexible parts of the body, are as continually renewed, and as properly a secretion, as the saliva that flows from the mouth, or the moisture that bedews the surface. The health of all the parts and their soundness of structure, depends upon this perpetual absorption and perpetual renovation; and exercise, by promoting at once absorption and secretion, promotes life without hurrying it, renovates all the parts, and preserves them apt and fit for every office. When the human frame is thus capable of being altered and renovated, it is not surprising that the art of training should be carried to a degree of perfection almost incredible; and that by certain processes the breath, strength, and courage of man should be so greatly improved as to enable him to perform the most laborious undertakings. That such effects have been produced is unquestionable, being fully exemplified in the astonishing exploits of our most celebrated pedestrians, which are the infallible results of preparatory discipline.

The skilful trainer attends to the state of the bowels, the lungs, and the skin; and he uses such means as will reduce the fat, and at the same time invigorate the muscular fibres. The patient is purged by drastic medicines; he is sweated by walking under a weight of clothes, and by lying between feather beds; his limbs are roughly rubbed; his diet is beef or mutton; his drink strong ale; and he is gradually inured to exercise by repeated trials in walking and running. By attenuating the fat, emptying the cellular substance, hardening the muscular fibre, and improving the breath, a man of the ordinary frame may be made to fight for one hour with the utmost exertion of strength and courage, or to go over one hundred miles in twenty-four hours.

The most effectual process for training is that practised by Captain Barclay, and the particular mode which he has adopted has not only been sanctioned by professional men, but has met with the unqualified approbation of amateurs. The following statement, therefore, contains the most approved rules, and it is presented to the reader as the result of much experience, founded on the theoretic principles of the art.

The pedestrian, who may be supposed in tolerable condition, enters upon his training with a regular course of physic, which consists of three doses. Glauber's salts are generally preferred, and from one ounce and a half to two ounces are taken each time, with an interval of four days between each dose. After having gone through the course of physic, he commences regular exercise, which is gradually increased as he proceeds in the training. When the object in view is to accomplish a pedestrian match, his regular exercise may be from twenty-four miles a-day. He must rise at five in the morning, run half a mile at the top of his speed up hill, and then walk six miles at a moderate pace, coming in about seven to breakfast, which should consist of beefsteaks or mutton chops under done, with stale bread and old beer. After breakfast he must again walk six miles at a moderate pace, and at twelve lie down in bed without his clothes for half an hour. On getting up he must walk four miles, and return by four to dinner, which should also be beefsteaks or mutton chops, with bread and beer as at breakfast. Immediately after dinner he must resume his exercise by running half a

mile at the top of his speed, and walking six miles at a moderate pace. He takes no more exercise for that day, but retires to bed about eight, and next morning proceeds in the same manner. After having gone in this regular course for three or four weeks, the pedestrian must take a four mile sweat, which is produced by running four miles in flannel at the top of his speed. Immediately on returning a hot liquor is prescribed in order to promote the perspiration, of which he must drink one English pint. It is termed the sweating liquor, and it is composed of the following ingredients, viz. one ounce of carraway seed, half an ounce of coriander seed, an ounce of root liquorice, and half an ounce of sugar-candy, mixed with two bottles of cider, and boiled down to one half. He is then put to bed in his flannels, and being covered with six or eight pairs of blankets and a feather bed, must remain in this state from twenty-five to thirty minutes, when he is to be taken out and rubbed perfectly dry. Being then well wrapped in a great coat, he walks out gently for two miles to breakfast, which on such occasions should consist of a roasted fowl. He afterwards proceeds with his usual exercise. These sweats are continued weekly, till within a few days of the performance of the match, or in other words he must undergo three or four of these operations. If the stomach of the pedestrian be foul, an emetic or two must be given about a week before the conclusion of the training, and he is now supposed to be in the highest condition. Besides his usual or regular exercise, a person under training ought to employ himself in the intervals in every kind of exertion which tends to activity, such as cricket, bowls, throwing quoits, &c., that during the whole day both body and mind may be constantly occupied.

The diet or regimen is the next point of consideration, and it is very simple. As the intention of the trainer is to preserve the strength of the pedestrian, he must take care to keep him in good condition by nourishing food. Animal diet is alone prescribed, and beef and mutton are preferred. The lean of fat beef cooked in steaks, with very little salt, is the best, and it should be rather underdone than otherwise. Mutton being reckoned easy of digestion, may be occasionally given, to vary the diet and gratify the taste. The legs of fowl are highly esteemed. It is preferable to have the meat broiled, as much of its nutritive quality is lost by roasting or boiling. Biscuit and stale bread are the only preparations of vegetable matter which are permitted to be given; and every thing inducing flatulency must be carefully avoided. Veal and lamb are never allowed, nor pork, which operates as a laxative on some people; and all fat or greasy substances are prohibited, as they induce bile and consequently injure the stomach. But it has been proved by experience that the lean of meat contains more nourishment than the fat, and in every case the most substantial food is preferable to any other kind.

Vegetables, such as turnips, carrots, or potatoes, are never given, as they are watery and of difficult digestion. On the same principle fish must be avoided, and, besides, they are not sufficiently nutritious. Neither butter nor cheese is allowed; the one being very indigestible, and the other apt to turn rancid on the stomach. Eggs are also forbidden, excepting the yolk taken raw in the morning. And it must be remarked, that salt, spices and all kinds of seasonings, with the exception of vinegar, are prohibited.

With respect to liquors, they must always be taken cold; and home-brewed beer, old but not bottled, is the best. A little red wine, however, may be given to those who are not fond of malt liquor, but never more than half a pint after dinner. Too much liquor swells the abdomen, and of course injures the breath. The quantity of beer, therefore, should not exceed three pints during the whole day, and it must be taken with breakfast and dinner, no supper being allowed.

Water is never given alone, and ardent spirits are strictly prohibited, however diluted. It is an established rule to avoid liquids as much as possible, and no more liquor of any kind is allowed to be taken than what is merely requisite to quench the thirst. Milk is never allowed, as it curdles on the stomach. Soups are not used; nor is any thing liquid taken warm but gruel or broth, to promote the operation of the physic, and the sweating liquor mentioned above. The broth must be cooled, in order to take off the fat, when it may be again warmed, or beef tea may be used in the same manner, with little or no salt. In the days between the purges, the pedestrian must be fed as usual, strictly adhering to the nourishing diet, by which he is invigorated.

Profuse sweating is resorted to as an expedient for removing the superfluities of flesh and fat. Three or four sweats are generally requisite, and they may be considered the severest part of the process.

Emetics are only prescribed if the stomach be disordered, which may sometimes happen, when due care is not taken to proportion the quantity of food to the digestive powers; but, in general, the quantity of aliment is not limited by the trainer, but left entirely to the discretion of the pedestrian, whose appetite should regulate him in this respect. Although the chief parts of the training system depend upon sweating, exercise, and feeding, yet the object to be obtained by the pedestrian would be defeated, if they were not adjusted to each

other, and to his constitution. The skilful trainer will, therefore, constantly study the progress of his art, by observing the effects of the processes separately, and in combination.

It is impossible to fix a precise period from the completion of the training process, as it depends upon the condition of the pedestrian; but from two to three months, in most cases, will be sufficient, especially if he be in tolerable condition at the commencement, and possessed of sufficient perseverance and courage to submit cheerfully to the privations and hardships to which he must unavoidably be subjected.

The criterion by which it may be known whether a man be in good condition, or, what is the same thing, has been properly trained, is the state of the skin, which becomes smooth, elastic, and well coloured, or transparent. The flesh is also firm, and the person trained feels himself light and full of spirits. But in the progress of the training, his condition may be as well ascertained by the effect of the sweats, which cease to reduce his weight, and by the manner in which he performs one mile at the top of his speed, as to walk a hundred; and therefore, if he performs this short distance well, it may be concluded that his condition is perfect, or that he has derived all the advantages which can possibly result from the training process.

The manner of training jockeys is different from that which is applicable to pedestrians and pugilists. In regard to jockeys, it is generally wasting with the view to reduce their weight. This is produced by purgatives, emetics, sweats, and starvation. Their bodily strength is of no importance, as they have only to manage the reins of the courser, whose fleetness depends upon the weight he carries; and the muscular power of the rider is of no consequence to the race, provided it be equal to the fatigue of a three or four mile heat.

Training for pugilism is nearly the same as for pedestrianism, the object in both being principally to obtain additional wind and strength. But it will be best illustrated by a detail of the process observed by Cribb, the Champion of England, preparatory to his grand battle with Molineaux, which took place on the 29th of September, 1811.

The champion arrived at Ury on the 7th of July of that year. He weighed sixteen stone; and from his mode of living in London, and the confinement of a crowded city, he had become corpulent, big-bellied, full of gross humours, and short-breathed, and it was with difficulty he could walk ten miles. He first went through a course of physic, which consisted of three doses; but for two weeks he walked about as he pleased, and generally traversed the woods and plantations with a fowling-piece in his hand. The reports of his musket resounded everywhere through the groves and the hollows of that delightful place, to the great terror of the magpies and wood-pigeons.

After amusing himself in this way for about a fortnight, he then commenced his regular walking exercise, which at first was about ten or twelve miles a day. It was soon after increased to eighteen or twenty; and he ran regularly, morning and evening, a quarter of a mile at the top of his speed. In consequence of his physic and exercise, his weight was reduced in the course of five weeks, from sixteen stone to fourteen and nine pounds. At this period he commenced his sweats, and took three during the month he remained at Ury afterwards; and his weight was gradudually reduced to thirteen stone and five pounds, which was ascertained to be his pitch of condition, as he could not reduce farther without weakening.

During the course of his training, the champion went twice to the Highlands, and took strong exercise. He walked to Mar Lodge, which is about sixty miles distant from Ury, where he arrived to dinner on the second day, being now able to go thirty miles a day with ease, and probably he could have walked twice as far if it had been necessary. He remained in the Highlands about a week each time, and amused himself with shooting. The principal advantage which he derived from these expeditions, was the severe exercise he was obliged to undergo in following Captain Barclay. He improved more in strength and wind by his journeys to the Highlands, than by any other part of the training process.

His diet and drink were the same as used in the pedestrian regimen, and in other respects the rules previously laid down were generally applied to him. That he was brought to his ultimate pitch of condition, was evident from the high state of health and strength in which he appeared when he mounted the stage to contend with Molineaux, who has since confessed, that when he saw his fine condition he totally despaired of gaining the battle.

Cribb was altogether about eleven weeks under training, but he remained only nine weeks at Ury. Besides his regular exercise, he was occasionally employed in sparring at Stonehaven, where he gave lessons in the pugilistic art. He was not allowed much rest, but was constantly occupied in some active employment. He enjoyed good spirits, being at the time fully convinced that he would beat his antagonist. He was managed, however, with great address, and the result corresponded with the wishes of his friends. *Sporting Repository.*

TRAP, *s.* A snare set for thieves or vermin; an ambush, a stratagem to betray or catch unawares; a play at which a ball is driven with a stick.

I place my trap a few yards to the right or the left of the partridge's nest (so that it may not catch the parent bird) but plainly in view, so that when the magpie approaches it cannot fail to see the bait. As magpies are fond of eggs, nothing can form a better bait (particularly in the breeding season) than a hen's egg, which should be perforated at each end, the contents blown out, and a small twig run through it into the ground, in order to give the magpie some trouble to get it off; and while it is endeavouring to pull it away, its feet should be on the bridge of the trap, the bait being placed at the requisite distance for that purpose. The plunderer is sure to be caught. The mere shell of the egg answers better for the purpose of a bait than if it contained its original contents, and it is thus more easily fastened to the requisite spot. I repeat, that the square is much preferable to the semicircular trap, as the latter is more apt to miss the thief, owing to its form.

If an egg be not at hand, or easily obtained, a piece of raw meat will answer the purpose, and will form a good bait:—a magpie is not very particular in its food.

If the kite or the buzzard be the object of consideration, the trap should be placed precisely in the same manner, but the bait should be a pigeon, a small rabbit, (or a piece of either) or any of the smaller kind of birds, or a piece of raw meat or liver will answer the purpose. The bait should be fastened, and if a few feathers are scattered about, it will be more easily perceived by these birds —they will discern it indeed at a great distance.—Kites and buzzards, though very mischievous, are few in number, and do not approach the human habitation with the same familiarity as the magpie or the crow. They are fond of being able to see a great distance around them, as if to prevent surprise; and for this reason they may be often seen, when they alight on the ground, to take their station on some hillock or eminence, on downs or other open places, whence they can survey the surrounding country. Wherever it is perceived that these birds frequent or haunt, the traps should of course be placed. Let it be further understood, that the application of these remarks is not intended to be confined to the breeding season. Whenever vermin, of any kind, are discovered, they should be trapped or destroyed—there is no mode so certain as the steel trap, when properly prepared and set.

The sparrow hawk, the hobby, &c., require a smaller trap than the kite or the buzzard, which is, however, to be prepared and placed in the same manner, and baited with a sparrow, lark, or other small bird (excepting the swallow tribe, which birds of prey refuse) and a few of its feathers scattered about for the purpose of attracting the object to be caught.

In regard to the quadrupedal vermin, and first of all for the polecat, it may be remarked, that when this animal is suspected of making free with the eggs of the pheasant or the partridge, the trap may be prepared for him precisely in the same manner as already described for the magpie, and he is sure to be caught; or should the track to his hole be discovered, he may be taken by placing the trap in it, close to the hole, (covered in all cases, as the most certain means of success,) with or without the bait, but the latter mode is preferable; or the deception may be placed a little out of his track; and perhaps half a yard out of his track is the better method. This animal is attracted by the smell of musk, and therefore the bait may be anointed with a little of the essence of this strong perfume: but it will answer the purpose without it; and the only effect, in fact, that it has, is merely enabling the polecat to smell or scent the bait at a greater distance. A trap placed at the entrance of the hole of the polecat, without a bait, will take him, if covered in the manner described in the preceding pages; but if not concealed, its effective operation will be very uncertain; with a rat it would fail: if the trap were so placed that the rat could not miss it in coming out, he would form another hole to avoid it, when the calls of hunger compelled him to leave his hiding place. The bait for a polecat should be a rat, a mouse, a bird, entrails, or indeed almost any animal substance will answer the purpose.—And what I have stated respecting the polecat is equally applicable to the stoat, and to all the weasel tribe.

The cat, as I have previously stated in a separate article, is very destructive to game; for which nothing is a more tempting bait than a sparrow, lark, &c., and, as these animals are attracted by valerian, the bait may be rubbed with it if convenient; but it is not absolutely necessary, as a cat is easily caught without that addition. Valerian may, as well as musk, be obtained at any druggist's shop. It will be requisite, of course, to set a larger trap for a cat than that which is used for a weasel or a magpie.

The caution of rats in approaching a trap is very well known, and, in fact, those who

attempt to take them in the common way uniformly fail; an odd one may perhaps be caught (and that not often) and the business ends. But when the trap is concealed in a proper manner, the rats are sure to be caught. —*Gamekeeper's Directory.*

TRAP, *v.* To ensnare, to catch by a snare or ambush; to decorate.

TRAPPINGS, *s.* Ornaments appendant to the saddle; ornaments, dress, embellishments.

TRAVEL, *s.* Journey, act of passing from place to place; the rate of a setter.

TRAVERSE, *v.* To cross, to lay athwart.

TRAUMATIC BALSAM, *s.* Compound tincture of benzoin, friar's balsam, &c.

Benzoin	. 3 oz.	Rectified spirit	. 1 quart.
Strained storax	. 2 oz.		
Balsam of tolu	. 1 oz.	Digest for fourteen days, and filter or strain.—*White.*	
Aloes	. ½ oz.		

TREAD, *v.* To walk on, to feel under the foot; to press under the foot; to track; to crush under foot; to put in action by the feet; to love as the male bird the female.

TRESPASS, *v.* To transgress, to offend; to enter unlawfully on another's ground.

TRESPASS, *s.* Transgression, offence; unlawful entrance on another's ground.

TRESPASSER. *s.* An offender, a transgressor; one who enters unlawfully on another's grounds.

Military Trespassers.—Killing or taking game, without leave from the lord of the manor, under his hand and seal, subject to penalties as follow:—

Officer 5*l.* Officer within whose command the offence is committed by a soldier, 1*l.* to the poor of the place, and (being convicted by a justice of peace, and the penalty demanded by the constable or overseer) the officer must pay it within two days, or forfeit his commission.

By this act, an officer, although invited by his friends to shoot on their land, may be sued for the above penalty by the lord of a manor, who has, perhaps, no right to sport there himself.

Notices of Trespass.—May be personally served, or left at the place of abode of the party trespassing.

Verbal notices are quite sufficient, if accurately proved.

All notices to come from the tenant and not from the landlord, who cannot support an action of trespass upon the land, of which he is not the occupier.

Gamekeepers, or other persons, may be deputed to serve either verbal or written notices, by lords of manors, occupiers of land, &c.

Instructions how to warn off a Trespasser.—The following is the proper form of a notice to be sent to, or served on, any person in particular.

To (name the person's christian and surname) of (name his residence).

I hereby give you notice, not to enter or come into or upon any of the lands, woods, underwoods, shaws, or coverts (or into or upon, any of the rivers, ponds, pools, waters, or water-courses) in my occupation in the parish of (name the parish, or if the lands lie in more than one, the several parishes) in the county of (name the county or counties) as, in case of your doing so, I shall proceed against you as a wilful trespasser. Witness my hand this (name the day of the month) day of — 18 .

(Sign your name.)

TREVIS, *s.* An instrument of restraint for horses.

The trevis is the very utmost limit of restraint, and is seldom used but by smiths to shoe very violent and powerful horses: whenever recourse is had to it, the greatest caution

is necessary to bed and bolster all the parts that are likely to come in contact with the body. On the continent I have seen horses very dexterously shod in this machine, and apparently put in under no other necessity than either to avoid labour, or, ridiculous as it may seem, to prevent the clothes of the smith from being injured or dirtied by the common method. Horses have been destroyed by the trevis, as well as by casting; or, at least, their aversion to the restraint has been such, that they have died under their own resistance; it, however, has a very decided advantage over casting, as it is seldom the vertebræ are fractured by it; and it might be so framed, I am convinced, as to render it a most efficient restraint for the performance of many operations, and might be further used as a slinging machine in many cases requiring suspension, which might here, by the adjustment of machinery, be made to act in many ways favourable to the horse and the practitioner. The side-line is now very generally used, not only in minor operations but also in those more important.—*Blaine.*

TREY, *s.* A three at cards.

TRIBE, *s.* A distinct species as divided by family—or any other characteristic.

TRIGGER, *s.* A catch to hold the wheel on steep ground; the catch that, being pulled, looses the cock of the gun. Hair triggers are generally used in duelling pistols and rifles.

Let the triggers of all your guns be made to go nearly alike; for, if one requires too hard a pull, it is a sad check to shooting; and, if it goes too easy, you are liable to the accident of firing the gun before it is fairly brought to the shoulder. Any tolerable mechanic may rectify these extremes, by filing, more or less, the part where the scear catches the tumbler. The most accurate way to regulate the pull of a trigger, as well as that of a cock, is by a small stilliard, which will draw out and regulate those of twenty guns to the same focus.

The triggers are now kept well in their places, by the constant pressure of little springs, and you must therefore push them back before you can let in your locks.—*Hawker.*—*Vide* SAFETY TRIGGER, *Appendix.*

TRIM, *v.* To fit out; to dress, to decorate, to shave, to clip.

It is necessary here to make some remarks on the absurd and mischievous practice of trimming horses' legs; that is, cutting off parts which were designed by the Almighty for a useful purpose, that of defending the pastern; whereby they expose an important part to injuries. The fetlock, as it is termed, is found in all horses, especially in those of the northern breed, and from its position is an admirable guard against thorns, furze, flints, or other bodies, to which the pastern, without it, is so much exposed. The only excuse for this foolish practice is, that it is customary, and makes a horse look clean about the legs; and this notion is carefully preserved, and impressed upon the minds of those inexperienced in horses, by the men employed to operate on the occasion. To such an extent is this absurd practice carried, that in Exeter it has become a distinct profession, for there is one man I know who appears to make it his sole employment. The hairs covering the back part of the legs, and fetlock joint, are always indicative of the horse's breed. In those of northern climates it is strong, abundant, and an excellent protection against accidents. In the Arabian and barb it is thin, silky, and highly ornamental. The English race-horse being a mixture of the Arab and the barb, with a very small proportion of the northern blood, has this ornament in nearly as great a degree as the Arab or barb. The English hunter has it in a less degree, but in sufficient quantity and strength for the defence of the pastern against furze, thorns, and flints; but there are many who thin or trim out the fetlock and pastern in such a manner, in order to make the horse appear well-bred, that it is made inadequate to the purpose for which it was intended. Hence it is that punctures and wounds in the back part of the pastern are so common as we find them. Wounds of the pastern, from the imprudent practice I have just described, often occasion severe lameness, and sometimes of considerable duration. They are generally occasioned by small thorns, which having entered the sheath of the tendon, are, from the hardness of the perforans tendon, turned on their side, and rendered less injurious than they would otherwise be; but even then the irritation they occasion is such as to produce a dreadful degree of lameness, and even locked jaw. This severe injury, however, is not common; more frequently the entrance of the thorn is effectually resisted by the sheath, so that the point is turned upward or downward, and the thorn laid flat on its surface. But most commonly the thorn is turned in an oblique direction, by entering the skin, and both the

tendon and its sheath escape injury. Whenever these accidents occur, it is of the utmost importance to remove the thorn as speedily as possible, and this can be done most readily with the instrument named dissecting forceps. The thorn will always be found in an oblique direction, and must be sought for accordingly. The search will always be successful, if careful, and in time. After the thorn has been extracted, an emollient poultice should be applied as long as it is necessary.—*White.*

TROLL, *v.* To troll, to run round; to fish with a rod which has a pulley towards the bottom.

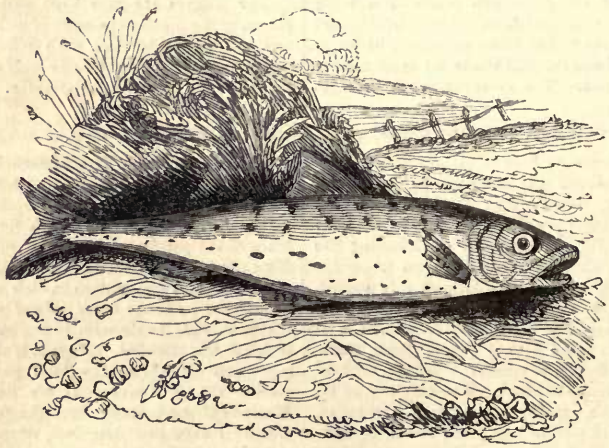
Trolling, in the limited sense of the word, means taking jack and pike with the gorge hook; live-bait fishing, when a floated line is used; and snap-fishing, when the angler so places his baited hooks, that, immediately he feels a bite, he strikes with much force, and generally throws over his head, or drags the jack or pike on shore, instead of playing his victim till he is exhausted.

Trolling is a valuable branch of fishing, affording the angler several months' amusement during the year, and it may be practised without danger to the health, when every other mode of angling ceases to be either profitable or prudent to follow; for as the winter approaches, fish seldom rise to the surface of the water, but leave the sharps, shallows, and scouers, for the more deep and still parts of rivers or other waters; the fly-fisherman may then lay by his tackle till the ensuing spring is well advanced.—*Salter.*

TROT, *v.* To move with a high jolting pace.

TROT, *s.* The jolting high pace of a horse.

TROUT, *s.* A delicate spotted fish inhabiting brooks and quick streams.



This very elegant species is plentifully distributed through the British waters, and varies in weight from a few ounces to fifteen or even thirty pounds.

The general shape of trouts is rather long than broad; in several of the Scotch and Irish lakes and rivers, they grow so much thicker than in those of England, that a fish from eighteen to twenty-two inches will often weigh from three to five pounds. The trout is a fish of prey, has a short roundish head, blunt nose, mouth wide, and filled with teeth, not only in the jaws, but on the palate and tongue: the scales are small, their back is ash colour, the sides yellow, and when in season, is sprinkled all over the body and covers of the gills with small beautiful red and black spots; the tail is broad.

There are several sorts of trout, differing in their size, (for in many of the smaller streams there are trouts that always continue small, but are very great breeders,) shape, and hue; but the flesh of the best is either red or yellow when dressed; the female fish has a smaller head and deeper body than the male, and is of superior flavour. In fact the colours of the trout and the spots vary greatly in different waters and at distinct seasons, yet each may be reduced to one species. In Lyndive, a lake in South Wales, are trout called coch-y-dail, with red and black spots as big as sixpences; others unmarked, and of a reddish hue, that some-

times weigh nearly ten pounds, but are ill-tasted. In Lough Neagh, in Ireland, are trout called buddaghs, which rise to thirty pounds; and some (probably of the same species) are taken in Ulleswater, in Cumberland, of still greater weight; and both those are supposed to be similar with the large trout of the lake of Geneva, a fish says Mr. Pennant which I have eaten of more than once, and think very indifferent.

* * *

A trout taken in Llynallet, in Denbighshire, which is famous for its excellent kind, was singularly marked and shaped; it measured seventeen inches in length, depth three and three quarters, and weighed one pound ten ounces; the head thick, nose sharp, both jaws as well as the head, of a pale brown, blotched with black; the teeth sharp and strong, dispersed in the jaws, roof of the mouth, and tongue (as is the case with the whole genus, except the gwinniad, which is toothless, and the grayling, which has none on the tongue), the back was dusky, and sides tinged with a purplish bloom, both above and below the side line, which was straight, and marked with deep purple spots, mixed with black. The belly was white; the first dorsal fin was spotted; the spurious fin brown, tipped with red; the pectoral, ventral, and anal fins of a pale brown; the edges of the latter white; the tail very little forked when extended.

Some peculiar remarks upon the various sorts of trout in the northern counties of England, and of their growth and age, have been given by a very experienced angler, to the following effect:—That he does not undertake to determine whether the river or burn trout are of one species: in many points the trout taken out of the same river and same pools will agree, and in some shall vary; so that, if the difference were owing to the water or food, he could say nothing against their being of one species: he believes they spawn promiscuously together, are all similar in shape, in the number of their fins, and their fins being disposed in the same places. Whether the colour of the spots make any specific variety, he leaves to the decision of naturalists; but, in his opinion, the so much esteemed char, both red and white, is only a meer or marsh trout, and the colour perhaps owing to the sex. In several of the northern rivers he has taken trouts as red and as well tasted as any char, and whose bones, when potted, have dissolved, like those of the char. That about Michaelmas he had caught trouts of a coppered hue, without spots; the flesh when dressed, was like bees-wax, and well tasted: that likewise in April he took one of these trout twenty-eight inches and thick in proportion, which boiled yellow, but was equally good; and this he thinks was the bull trout mentioned by Walton, and several authors, as extraordinary both for its size and goodness, and to be found no where but in Northumberland. He records a still larger fish caught in the same river (the Cocquet) by him in September, near Brenkburn Abbey; the length, which was nearly a yard, did not strike this gentleman so much, as the bright spots upon the lateral line; by which it appeared to him to be an overgrown burn trout, and neither a salmon, salmon-trout, nor the same with those two he thought were the bull trout.

Walton mentions the Fordwich trout taken in the river Stour, of which only one instance was ever known of their being caught by the angle, and are said to be delicious eating; one weighing twenty-six pounds, and of a most beautiful colour, was taken with a net in December 1797; they grow to a larger size.

* * *

The burn or river trout, with plenty of food and good water, grows rapidly; several experiments were made in ponds fed by river water, and some by clear springs, into which the young fry have been put at five or six months old (that is, in September or October, reckoning from April, when they first come from the spawning-beds) at which time they will be six or seven inches long; in eighteen months the change has been surprising; he has seen a pond drained ten months after being thus stocked, which was in July, when the fish were fifteen months old; some were fifteen or sixteen inches, others not more than eleven or twelve; the fish were returned into the pond, and it was again drained the March following, when some were twenty-two inches, and weighed three pounds; others were sixteen inches, and some not more than twelve.

* * *

In March, or, if mild open weather, in February, trouts begin to leave their winter quarters, and approach the shallows and tails of streams, where they cleanse and restore themselves to health; as they acquire strength they advance still higher up the rivers, until they fix upon their summer residence, for which they generally choose an eddy, behind a stone, a log, or bank that projects forward into the water, and against which the current drives; whirlpools and holes into which sharps and shallows fall, under roots of trees, and in places shaded by boughs and bushes; in small rivers they frequently lie under sedges and weeds, especially in the beginning of the year, before their perfect strength is recovered; but when in their prime, they feed in the swiftest streams, and are often found at the upper end of mill-pools, at locks, floodgates, and weirs, also under bridges, or between two streams running from under their arches, and likewise in the returns of streams, where the water seems to boil; in the de-

cline of summer, they lie at mill-tails, or the end of other streams, and in the deep water.

* * *

Trout spawn, or deposit their ova and seminal fluid in the end of the autumn or beginning of winter, from the middle of November till the beginning of January; their maturity depending upon the temperature of the season, their quantity of food, &c. From some time (a month or six weeks) before they are prepared for the sexual function, or that of reproduction, they become less fat, particularly the females; the large quantity of eggs and their size, probably affecting the health of the animal, and compressing generally the vital organs in the abdomen. They are at least six weeks or two months after they have spawned before they recover their flesh; and the time when these fish are at the worst is likewise the worst time for fly-fishing, both on account of the cold weather, and because there are fewer flies on the water than at any other season.

* * *

It has been remarked by many other people, as well as myself, that, of all fish in existence, there is not one that you can partake of so many days in succession, without ceasing to enjoy it, as a trout, provided it be fresh caught, and well in season. Almost every sportsman, and every fishmonger, has his own way of fancying that he can tell when a trout is in season. As to the red spots on the skin having any thing to do with it, the very idea is absurd and fallacious. But the more general criterions are a small head and high crest, a full tail, and the roof of the mouth, or, what is still better, the flesh under the tongue being rather of a pink colour. Another excellent criterion, which was explained to me by Mr. Joseph Miller, the fishmonger in Piccadilly, is the smallness and tightness of the vent; for the better the trout is in season, the smaller will be that vent-hole, which is formed just before the under or belly-fin. And, after all, I prefer this, and one other way of deciding; which is by the bright and silver-like appearance of the scales. Take twenty trout, and, I think, if you dress them all, and previously mark that one on which the scales shone the brightest, it will prove to be the best fish. This may be frequently ascertained, even before you land a trout, as a bright one, on being first hooked, generally gives two or three leaps out of the water.

Before you send trout on a journey, always have them cleaned and gutted, and let them be laid on their backs, and closely packed in willow (not flag) baskets, and with either flags or dry wheat-straw. Packing in damp grass or rushes is apt to ferment, and therefore liable to spoil your fish.

* * *

Salmon and trout were here to be found among the rest. Indeed the people asserted there were nine kinds of the former, for all of which they had names, each kind making its appearance in the river at different periods of the year. This must of course be a mistake, as so many varieties of that fish do not, I imagine, exist.

Altogether I caught thirty-seven trout and salmon, their aggregate weight being two hundred and twenty-six pounds, or on an average something better than six pounds a-piece. The greatest number I killed in any one day were seven, and the largest I took was eighteen pounds; this weight was however comparatively nothing, for in the river below the falls salmon were occasionally taken in nets weighing forty, fifty, sixty, and even seventy pounds.

The trout are very fine at Trolhattan; I have killed them upwards of twelve pounds' weight. They are about the best grown fish I ever saw in my life.

* * *

The high flavour and red colour for which the fish taken in Lochleven are so famed, are understood to arise from the ford by which they are supported in the loch; it being a general rule that while the flesh of trout is white in clear and limpid waters, the same sort, when found where the rivers pass slowly through a tract of foul or meadow ground, have less or more redness in their colour. A considerable part of the bottom of Lochleven is spongy, from which aquatic plants rise in great abundance; and in many parts, towards the beginning of autumn, cover the surface of the water with their flowers. But the circumstance to which the high colour of the Lochleven trout is chiefly ascribed, is the vast quantity of a small red shell fish which abounds in the bottom of the loch, and especially among the aquatic plants; its form is globular, and the trouts when caught have often their stomachs full of these shell-fish. They generally lie in deep water, and will not rise to any kind of fly or hook however baited: it has been remarked also, that in Lochleven are discovered all the different species of river trout, and after they have remained some time in the loch, and approached towards one pound in weight, they become red in flesh. (*Vide* Fishing, Rod, Worm, &c., &c.)—*Daniel—Davy—Lloyd—Wild Sports, &c.*

Trump, *s.* A trumpet, an instrument of warlike music; a winning card; a card that has particular privileges in a game.

Trump, *v.* To win with a trump card.

Truss, *s.* A bandage by which ruptures are restrained from lapsing.

Trussing, *s.* Term applied to a hawk when she raises a fowl into the air, and descends rapidly again.

Tumbler, *s.* One who shows postures or feats of activity; a pigeon.

Tumid, *a.* Swelling, puffed up; protuberant, raised above the level; pompous, boasting, puffy, falsely sublime.

Tun, *s.* A large cask; two pipes, the measure of four hogsheads; any large quantity proverbially; a drunkard, in burlesque; the weight of two thousand pounds; a ton.

Turbith Mineral, *s.* Subsulphate of mercury, yellow mercurial emetic, or vitriolated quicksilver.

This mercurial preparation is seldom used in veterinary practice, being apt to irritate the stomach and bowels, and bring on violent purging; but it has been recommended as a remedy for farcy.

The dose is from half a drachm to a drachm. It is given as an emetic to dogs, when they have swallowed any poisonous substance, or at the commencement of the distemper.—*White.*

Turf, *s.* A clod covered with grass; a part of the surface of the ground; akind of fuel; a racecourse. *To be on the turf,* to be engaged in horse-racing.

Turnip, *s.* A white esculent root.

Turnpike, *s.* A cross of two bars armed with pikes at the end, and turning on a pin, fixed to hinder horses from entering: a gate erected on the road to collect tolls to defray the expense of repairing roads.

Turnspit, *s.* He who anciently turned a spit; a dog used for this purpose.

Turpentine, *s.* The gum exuded by the pine, the juniper, and other trees of that kind.

Of turpentines there are four kinds, viz. Chio, Strasburg, Venice, and common turpentine; the two last only are employed in veterinary medicine. They are effectual diuretics, and possess a considerable carminative power. Common turpentine is a principal ingredient in digestive and detergent ointments. By distillation we obtain from it the oil, or, as it is sometimes termed, the spirit of turpentine, a medicine of great utility. In doses from two to three or four ounces, it frequently cures the flatulent colic or gripes; and, when combined with camphor and other stimulants, makes a good embrocation for indurated swellings, strains, and bruises. When properly mixed with mustard, it forms an embrocation that has been found serviceable in counteracting internal inflammation. I have seen it applied to obstinate ulcers with good effect. It is a useful ingredient in blistering-ointment and liniments.

* * *

In speaking of the turpentines, Dr. Paris says they all possess the same chemical as well as medicinal properties, viz. Canada turpentine, or Canada balsam, as it is sometimes improperly called, is obtained from the Pinus Balsamea. 2dly, Chian or Cyprus turpentine, from the Pistachia Terebinthinus. 3dly, Common, or horse turpentine, from the Pinus Sylvestris, or Scotch fir. 4thly, Venice turpentine from the Pinus Larix; from the twigs of this species of fir the essence of spruce is made. True Riga balsam is made from the shoots of the Pinus Cembra, previously bruised and macerated for a month in water. The same fir also yields Briançon turpentine.

Venice turpentine is generally made by mixing oil with the common turpentine, which is easily done when the latter is melted.

Venice turpentine is sometimes employed as an ingredient in cough medicines. The dose is about half an ounce. But if given as a remedy for flatulent colic, or as a diuretic, a larger quantity is necessary. It makes a good detergent ointment, if mixed with about a fourth or a third part of red precipitate, finely powdered.

Dr. Latham considers it a valuable medicine in epilepsy. As a veterinary medicine it is certainly of great value; and though in a few cases, when given internally, it has produced violent effects, merely, I believe, from bad management, yet, when judiciously administered, it may be employed in a dose of four ounces, with advantage and safety.

I have long discontinued the use of oil of turpentine in my practice as a remedy for flatulent colic, gripes, or fret; finding the preparations of opium far more effectual.—*White.*

Turtle, *s.* The sea tortoise.

Turtle Dove (*Columba turtur*, Linn.; *La Tourtourelle*, Buff.), *s.*

Length somewhat more than twelve inches; the bill is brown; eyes yellow, encompassed with a crimson circle; the top of the head is ash-colour, mixed with olive; each side of the neck is marked with a spot of black feathers, tipped with white: the back is ash-colour, each feather margined with reddish brown; wing coverts and scapulars reddish brown, spotted with black; quill feathers dusky, with pale edges; the fore part of the neck and the breast are of a light purplish red; the belly, thighs, and vent, white; the two middle feathers of the tail are brown, the others dusky tipped with white; the two outermost also edged with the same; the legs are red.

The note of the turtle dove is singularly tender and plaintive; in addressing his mate the male makes use of a variety of winning attitudes, cooing at the same time in the most gentle and soothing accents; on which account the turtle dove has been represented in all ages as the most perfect emblem of connubial attachment and constancy. The turtle arrives late in the spring, and departs about the latter end of August; it frequents the thickest and most sheltered parts of the woods, where it builds its nest on the highest trees; the female lays two eggs, and has only one brood in this country, but in warmer climates it is supposed to breed several times in the year. Turtles are pretty common in Kent, where they are sometimes seen in flocks of twenty or more, frequenting the pea fields, and are said to do much damage. Their stay with us seldom exceeds more than four or five months, during which time they pair, build their nests, and rear their young, which are strong enough to join them in their retreat.—*Bewick.*

Tush or Tusk, *s.* The long tooth of a fighting animal, the fang, the holding tooth.

Tusked or Tusky, *a.* Furnished with tusks.

Twine, *s.* A twisted thread; twist, convolution; embrace; act of convolving itself round.

Twinling, *s.* A twin lamb, a lamb of two brought at a birth.

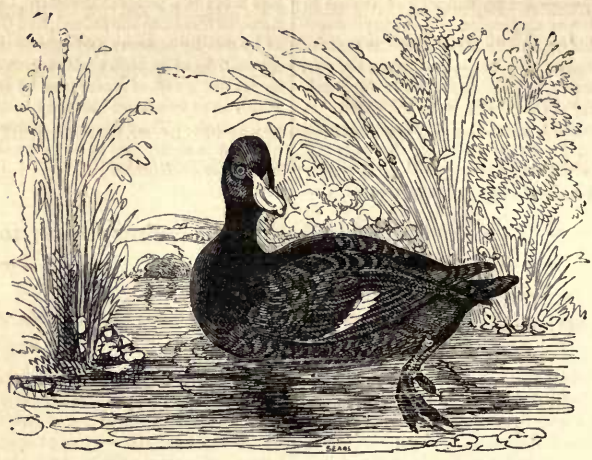
Twitch, *v.* To pluck with a quick motion, to snatch.

The twitch is a very necessary instrument in a stable, though, when frequently and unnecessarily used, it may have the ill effect of rendering some horses violent and vicious to resist its future application. In many instances blindfolding will do more than the twitch; and some horses may be quieted, when the pain is not excessive, by holding the ear in one hand, and rubbing the point of it with the other. A firm but soothing manner will often engage the attention and prevent violence; but it is seldom that either threats or punishment render an unruly horse better. Inexperienced persons guard themselves against the hind feet only, but they should be aware that some horses strike as truly and as terribly with their fore feet: it is prudent therefore, in all operations, to blindfold the animal, and the more so, as by this he becomes particularly intimidated, nor will he often strike without an aim. Barnacles are a sort of clams used by smiths, into which they introduce the nose in the manner of a twitch. They are only admissible when a person is so situated as to be wholly without assistance.—*Blaine.*

Twitter, *v.* To make a sharp tremulous intermitted noise; to be suddenly moved with any inclination.

Tympanum, *s.* A drum, a part of the ear.

Tyro, *s.* One yet not master of his art.



THE VELVET DUCK.

VALERIAN, *s.* A plant, of which cats are immoderately fond.

VAPOUR, *s.* Anything exhalable, anything that mingles with the air; wind; fume, steam; diseases caused by diseased nerves; melancholy, spleen.

VARNISH, *s.* A matter laid upon wood, metal, or other bodies, to make them shine.

As moisture is at all times destructive to wood, it is essential for the angler to guard all in his power against its influence on his rod; for, admitting that a shower of rain will not spoil it, yet if not protected by varnish, it may soon be deprived of its elasticity, which is the chief requisite of any, and more particularly of a fly-rod. Variety of methods are used in preparing varnish; the one here mentioned is said to be excellent.

Varnish Recipe.—Half a pint of linseed oil, and a little India rubber scraped fine; put them over a slow fire, and stir them well together, until the rubber is dissolved, then boil and skim it, apply it warm, and do not use the rod until quite dry. The appearance upon the rod will be like a fine thin bark; it will preserve the rod from being worm-eaten, and from other injuries, and is very durable.

Another.—Half an ounce of shell, and the same quantity of seedlac powdered fine in a mortar; put into separate phials, with half a pint of good spirits of wine in each, and placed in a sand heat to dissolve; during the process, shake the phials often; when each is dissolved, mix them together in a larger bottle, with half an ounce of gum benzoin; increase the heat, and the dregs will subside; then warm the wood, and with a camel's hair brush apply that part of the varnish which is become fine; the third coat will remain on the surface, and securely protect the rod from injury.—*Old Receipts.*

VARNISH, *v.* To cover with something shining.

VASCULAR, *a.* Consisting of vessels, full of vessels.

VAULT, *v.* To leap, to jump.

UDDER, *s.* The breast or dugs of a cow, or other large animals.

VEAL, *s.* The flesh of a calf killed for the table.

VEGETABLE, *s.* Anything that has growth without sensation, as plants.

VEGETABLE, *a.* Belonging to a plant; having the nature of plants.

VEHICLE, *s.* That in which any thing is carried; that part of a medicine which serves to make the principal ingredient potable; that by means of which anything is conveyed.

VEIN, *s.* The veins are only a continuation of the extreme capillary arteries reflected back again towards the heart, and uniting their channels as they approach it.

VEINY, *a.* Full of veins; streaked, variegated.

VELOCITY, *s.* Speed, swiftness, quick motion.

VELVET, *s.* Silk, with a short fur or pile upon it.

VELVET DUCK, DOUBLE SCOTER, or GREAT BLACK DUCK, (*Anas Fusca*, LINN.; *Le Grand Macreuse*, BUFF.) *s.*

The velvet duck is larger than a mallard, weighing about three pounds two ounces, and measuring above twenty inches in length.

They spread themselves in small numbers along the shores of Western Europe, as far as France, where they sometimes appear in company with the large flocks of scoters, and are often caught in the fishermen's nets with those birds; but they are seldom met with on the British shores.

* * *

The bill broad, with a black knob at the base; the rest of the bill is yellow; the nail red; the edges all round black; the plumage is black, inclining to brown on the belly; under each eye is a white mark passing backwards in a streak; across the middle of the wing is a band of white; legs red; claws black. The female is more inclining to brown, and the protuberance on the bill is wanting; forehead and cheeks under the eye, dull brownish; behind that a large oval spot of white; whole upper parts and neck dark brownish drab; tips of the plumage lighter; second ones white; wing quills deep brown; belly brownish-white; tail hoary-brown; the throat white, marked with dusky specks; legs and feet yellow.

This species much resembles the scoter, only that bird has no white feathers about it, and the colour of the bill is somewhat different. In the windpipe of this bird is a singular bony swelling, the size of a small walnut, situated about two-thirds of the length from the larynx; immediately under the larynx is another oblong bony cavity, of nearly an inch in length; at the divarication the parts become bony, but not greatly enlarged. This is peculiar to the male sex.—*Montagu.*

VENATIC, *a.* Used in hunting. *obs.*

VENATION, *s.* The act or practice of hunting. *obs.*

VENEER, *v.* To make a kind of marquetry, or inlaid work.

VENOMOUS, *a.* Poisonous.

VENERY, *s.* The sport of hunting; the commerce of the sexes.

VENESECTION, *s.* Bloodletting, the act of opening a vein, phlebotomy.

VENISON, *s.* Game, beast of chace, the flesh of deer.

VENT, *s.* A small aperture; a hole; a spiracle; the aperture of a bird or fish; act of opening; emission; discharge.

VENTER, *s.* Any cavity of the body; the abdomen.

VENT FEATHERS (*Crissum*, LINN.), *s.* In ornithology, are those that lie from the vent, or anus, to the tail underneath.

VENTILATOR, *s.* An apparatus to supply close places with fresh air.

VENTRICLE, *s.* The stomach; any small cavity in an animal body, particularly those of the heart.

VERDERER, *s.* An officer of the forest.

In every forest there are usually four verderers, so named from *viridis* or *vert.* The verderer is a judicial officer of the forest, chosen by force of the king's writ in full county, and sworn to maintain the laws of the forest, and to view, receive, and enrol the attachments and presentments of all trespasses within the forest of vert and venison.

VERDIGRIS, *s.* The rust of brass.

VERJUICE, *s.* Acid liquor expressed from crab apples.

VERMICULAR, *a.* Acting like a worm, continued from one part to another.

VERMIFUGE, *s.* Any medicine that destroys or expels worms.

VERMILION, *s.* The cochineal, a grub of a particular plant; factitious or native cinnabar, sulphur mixed with mercury; any beautiful red colour.

VERMIN, *s.* Any noxious animal.

To destroy vermin.—When dogs are afflicted with lice, the most effectual remedy is to rub the whole animal over with train-oil; allow it to remain on half an hour, and then wash it off with salt of tartar, or potashes and water. Soft soap made into a thick paste, and rubbed over the body, and allowed to remain on an hour before washing the dog, will effectually destroy them.

N. B.—The method of giving any bolus, pill, or other medicine to a dog, is to pull out his tongue, then put it down his throat as far as possible, and when the dog draws in his tongue, the medicine will descend into his stomach.

Sopping the skin with tobacco water has been recommended; but it has only a momentary effect, and it not unfrequently poisons the dog. Innumerable other means I have tried to drive away fleas, but the only tolerably certain one I have discovered, is to make dogs sleep on fresh yellow deal shavings. These shavings may be made so fine as to be as soft as a feather bed; and, if changed every week or fortnight, they make the most cleanly and wholesome one that a dog can rest on; and the turpentine in them is very obnoxious to the fleas. But, where it is absolutely impracticable to employ deal shavings, it will be found useful to rub or dredge the dog's hide, once or twice a week, with very finely powdered resin: if simply rubbed in, add some bran.—*Brown—Blaine.*

VERNAL, *a.* Belonging to the spring.

Vernal Birds of Passage.—The earlier or later appearance of our spring birds may be found to arise from accidental vicissitudes of the season in those countries from whence they come; and, viewed in this light, the time of their arrival becomes an interesting phenomena to note down. Generally speaking, they arrive at the following times, on an average of many years:—

Wryneck	Middle of March.
Smallest Willow Wren	March 25.
House Swallow	April 15.
Martin	April 20.
Sand Martin	April 20.
Blackcap	April 17.
Nightingale	April 10.
Cuckoo	April 21.
Yellow Willow Wren	April 20.
Whitethroat	April 16.
Redstart	April 16.
Night Plover or Stone Curlew	March 27.
Grasshopper Lark	April 15.
Swift	May 9.
Lesser Red Sparrow	April 30.
Corn Crake or Land Rail	April 25.
Largest Willow Wren	End of April.
Fern Owl	May 20.
Flycatcher	May 3.

Other birds, water wagtails for instance, who only make partial migrations, are more uncertain in their times of appearance.—*Foster.*

VERT, *s.* Everything that grows and bears a green leaf within the forest.

VERTEBRAL, *a.* Relating to the joints of the spine.

VERTEBRÆ, *s.* Joints of the back.

VERTIGO, *s.* A giddiness, a sense of turning in the head. According to White fast trotters are particularly subject to this disease.

When a horse has been worked hard and fed high, and especially horses that excel in trotting, we often find, in the course of a few years, that they appear giddy at times, or when trotting suddenly stand still; ramble or reel a little, and shake their heads; but after a short time recover. Sometimes they reel and drop down, and lie motionless for some time; when they get up again, and recover in a short time. Sometimes after falling down, they are convulsed, and the eyes are distorted; from this state also they recover after a short time.—*White.*

VESICATE, *v.* To blister.

VESICATORY, *s.* A blistering medicine.

VETERINARY, *a.* Belonging to cattle, particularly horses.

VIBRISSÆ (LINN.), *s.* In ornithology, are hairs that stand forward like feelers: in some birds they are slender, as in flycatchers, &c. and point both upwards and downwards, from both the upper and under sides of the mouth. *Vibrissæ pectinatæ* (LINN.), in ornithology; these hairs are very stiff, and spread out on each side like a comb from the upper sides of the mouth of the nightjar.—*Montagu.*

VICE, *s.* The course of action opposite to virtue; a fault, an offence; a kind of small iron press with screws. *Vice*, in horses, ill temper, savageness.

VINGT-UN, *s.* A game.

Vingt-un, or twenty-one, very much resembles quinze; but may be played by two or more persons, and as the deal is advantageous, and often continues long with the same person, it is usual to determine it at the commencement by the first ace turned up.

The cards must all be dealt out in succession, unless a natural vingt-un occurs, and in the mean time the pone, or youngest-hand, should collect those that have been played, and shuffle them ready for the dealer against the period when he shall have distributed the whole pack. The dealer is first to give two cards, by one at a time to each player, including himself, then to ask every person in rotation, beginning with the eldest hand on the left, whether he stands or chooses another card, which, if required, must be given from off the top of the pack, and afterwards another, or more, if desired, till the points of the additional card or cards, added to those dealt, exceed or make twenty-one exactly, or such a number less than twenty one, as may be judged proper to stand upon; but when the points exceed twenty-one, then the cards of that individual player are to be thrown up directly, and the stake to be paid to the dealer, who is also in turn entitled to draw additional cards, and on taking a vingt-un is to receive double stakes from all who stand the game, such other players excepted who may likewise have twenty-one, between whom it is thereby a drawn game: when any person has vingt-un, and the dealer not, he who has it wins double stakes of the dealer; in other cases, except a natural vingt-un happens, the dealer pays single stakes to all whose numbers under twenty-one are higher than his own, and receives from those who have lower numbers; but nothing is paid or received by such players as have similar numbers to the dealer: and when the dealer draws more than twenty-one, he is to pay to all who have not thrown up.

Twenty-one, made by an ace and a ten, or court card, whenever dealt in the first instance, is styled a natural vingt-un, should be declared immediately, and entitles the possessor to the deal, besides double stakes, from all the players, unless there shall be more than one natural vingt-un, in which case the younger hand or hands so having the same, are excused from paying to the eldest, who takes the deal of course.

N.B. An ace may be reckoned either as eleven or one; every court-card is counted as ten, and the rest of the pack according to their pips.—*Hoyle.*

VINEGAR, *s.* Wine grown sour.

Vintage, *s.* The produce of the vine for the year; the time in which grapes are gathered.

Viper, *s.* A serpent of that species which brings its young alive; any thing mischievous.

When I wrote to you last year on reptiles, I wish I had not forgot to mention the faculty that snakes have of stinking *se defendendo*. I knew a gentleman who kept a tame snake, which was in its person as sweet as any animal while in good humour and unalarmed; but as soon as a stranger, or a dog or cat, came in, it fell to hissing, and filled the room with such nauseous effluvia as rendered it hardly supportable. Thus the squnck, or stonck, of Ray's Synop. Quadr. is an innocuous and sweet animal; but, when pressed hard by dogs and men, it can eject such a most pestilent and fetid smell and excrement, that nothing can be more horrible.

* * *

On August the 4th, 1775, we surprised a large viper, which seemed very heavy and bloated, as it lay in the grass basking in the sun. When we came to cut it up, we found that the abdomen was crowded with young, fifteen in number; the shortest of which measured full seven inches, and were about the size of full grown earthworms. This little fry issued into the world with the true viper spirit about them, showing great alertness as soon as disengaged from the belly of the dam: they twisted and wriggled about, and set themselves up, and gaped very wide when touched with a stick, showing manifest tokens of menace and defiance, though as yet they had no manner of fangs that we could find, even with the help of our glasses.

To a thinking mind nothing is more wonderful than that early instinct which impresses young animals with the notion of the situation of their natural weapons, and of using them properly in their own defence, even before those weapons subsist or are formed. Thus a young cock will spar at his adversary before his spurs are grown: and a calf or lamb will push with its head before its horns are sprouted. In the same manner did these young adders attempt to bite before their fangs were in being. The dam, however, was furnished with very formidable ones, which we lifted up (for they fold down when not used) and cut them off with the point of our scissors.

There was little room to suppose that this brood had ever been in the open air before; and that they were taken in for refuge, at the mouth of the dam, when she perceived that danger was approaching; because then probably we should have found them somewhere in the neck, and not in the abdomen.—*White's Selborne.*

Viperous, *a.* Having the qualities of a viper.

Viscera, *s.* The bowels or entrails.

Viscera of the horse.—The alimentary canal is continued from the expellent orifice of the stomach to the anus, or end of the passage; forming a long canal, whose varying dimensions have occasioned it to be divided into the small and large intestines. The length of the tract ranges between twenty-seven and thirty yards; of which proportions the small intestines occupy from twenty to twenty-two yards, and the large from seven to eight. It is not easy to give a determinate place to the intestines, either individually or generally; the large, however, may be said to occupy all the inferior portion of the abdomen throughout, and the small to range between and upon them; both occasionally shifting their position by the peristaltic motion. They are, however, prevented from an unnatural displacement, by membranous productions of the peritoneum, under the name of mesentery, mesocolon, and mesorectum. The first intestinal coat is derived from the peritoneum, which separates to receive the tube between its lamen; at once protecting it, and affording a medium for the transmission of its vessels and a lubricating surface. The second, or muscular coat, presents a longitudinal and a circular plan of fibres; by the contraction of which, the vermicular motion, called peristaltic, is performed, the longitudinal slightly shortening them, and the circular diminishing their diameter; the inner surface of this fabric being garnished with a quantity of dense cellular tissue, was formerly erroneously considered as another and a nervous coat. The inner tunic of the intestinal canal is villous, or mucous, and is very vascular and sensible, its villi presenting an increased surface for the mucous secretion, as well as more numerous chyliferous orifices, with which it is thickly studded; but it presents no valvulæ conniventes, as in the human, their place being supplied by the increased length of the tract.—*Blaine.*

Viscous, *a.* Glutinous, sticky, tenacious.

Vision, *s.* Sight, the faculty of seeing; the act of seeing.

Vision of Birds.—Ross, in his voyage to Baffin's Bay, proved that a man under favourable circumstances could see over the surface of the ocean to the extent of one hundred and fifty English miles. It is not probable that any animal exceeds this power of vision, though birds, perhaps, excel men and most quadrupeds in sharpness of sight. Schmidt threw at a considerable distance from a thrush (*Turdus musicus*) a few small beetles, of a pale grey-colour, which the unassisted human eye could not discover, yet the thrush observed them immediately and devoured them. The bottle tit (*Parus caudatus*,) flits with great quickness among the branches of trees, and finds on the very smooth bark its particular food, where nothing is perceptible to the naked eye, though insects can be detected there by the microscope. A very tame red-breast (*Sylva rubecula*, Latham,) discovered crumbs from the height of the branch where it usually sat, at the distance of eighteen feet from the ground the instant they were thrown down, and this by bending its head to one side, and using of course only one eye. At the same distance a quail discovered, with one eye, some poppy-seeds, which are very small and inconspicuous. —*Montagu.*

Vitriol, *s.* Vitriol is produced by addition of a metallic matter with the fossil acid salt.

Vitriolic, *a.* Resembling vitriol, containing vitriol.

Vitriolated Zinc, *s.* White vitriol.

Vives, *s.* A disease in horses.

This disorder consists of a swelling of the parotid gland, situated immediately beneath the ear, and is commonly named the vives or ives. Fomentations of hot water should be first applied, that is, a large piece of thick woollen cloth should be wrung out of hot water, and kept in contact with the swelling. After continuing this operation for some time, the woollen cloth may be confined close to the part, by suitable bandages, until it is convenient to repeat the fomentation. Sometimes these swellings go on to suppuration, and burst; when this happens, the opening should be enlarged sufficiently to introduce the fore-finger, and when the extent of the cavity has been thus ascertained, any further opening, should it appear necessary, may be made. A tent of digestive ointment is then to be applied, and repeated daily until the disease is cured. Sometimes these swellings continue hard, and I have known them prevent a horse from feeding. In a case of this kind, which I met with last spring, I completely relieved the horse in a short time, by rubbing in the following ointment:—

Crystallised tartarised antimony, very finely powdered.	2 drachms.
Olive oil.	1 drachm.
Hog's lard.	1 ounce.

Mix.

The hair must be closely cut off from the swelling, and the ointment well rubbed in with the hand for about ten minutes. When horses have sore necks, and lose the jugular vein, which sometimes happens after bleeding, a hard swelling of the parotid gland takes place, which generally continues a considerable time. In such cases, the above ointment, after the disease in the neck has been cured, may be tried.—*White.*

Ulcer, *s.* A sore of continuance, not a new wound.

Ulceration is a process directly the reverse of granulation; for as that builds up, so ulceration directly breaks down parts, which become absorbed through the medium of the lymphatics; the surfaces thus acted on producing at the same time a purulent or other discharge. An abraded surface thus circumstanced is called an ulcer, for the cure of which we must endeavour to remedy the morbid action, by exciting a new and more healthy one; by which the part being then brought to the condition of a simple wound, will heal. When ulcers have continued for a long time, it is often necessary to employ constitutional remedies to establish a cure. In full habits we increase the other secretions, as those of the bowels, the kidneys, the skin, &c., by purgatives, diuretics, and such remedies as act on the skin. We also lessen the excess of morbid secretion of pus, by establishing a new and artificial drain in the neighbourhood, which is done by setons or by rowels. In some cases, instead of existing plethora the ulcer has occasioned, or is accompanied by great irritability of system, which must be combatted by opium, and other sedatives; or if debility become very apparent, tonics must be given, together with liberal diet. In general cases, stable soiling, a course of carrots, or other total change of food, assists the healing and restorative process greatly. Ulcers are often found of a greater extent internally than externally;

and when such cavities extend in different directions, they form the sinuses of the surgeon and the pipes of the farrier: when the edges of the external opening are hardened, it is said to be fistulous. In general cases, the longer an ulcer has lasted, the more obstinately will the vessels have gained a diseased habit, and the more difficulty there will be to bring them back to a healthy state. The external means employed for this purpose are usually three; stimulating injections, seton, or incision; which operations it will not be necessary to enter upon here, as we shall proceed to describe the more common and important ulcers, with their treatment, separately. It remains, however, to state, that ulcers in general are apt to be treated by farriers erroneously, by plugging up the sinuses, by which the matter formed penetrates farther, bringing into its own action all the neighbouring parts. They likewise dress them so seldom, that the pus frequently takes on a process of decomposition, and becomes acrid; and, lastly, they neglect to gain a depending orifice for these collections.—*Blaine.*

Ulcerate, *v.* To disease with sores.

Ulceration, *s.* The act of breaking into ulcers; ulcer, sore.

Umbla, or Ombre Chevalier, *s.* A fish.

The umbla or ombre chevalier, is very like a char in form, but is without spots, and has a white and silvery belly. On the table, its flesh cuts white or cream-colour, and it is exceedingly like char in flavour. On February 11th, 1827, one was brought me from the lake of Bourget, in Savoy; it was said to be small for this fish, it was fifteen inches long, and seven and a half in circumference. In the dorsal fin there were twelve spines, in the pectoral nine, in the ventral eight, in the anal eleven, and in the caudal twenty-four.

Bloch says, that it is peculiar to the lakes of Geneva and Neufchatel; but what I have just said must convince you of the inaccuracy of this statement, as I dare say the fish exists in other deep waters of a like character amongst the Alps. It is a fish closely allied to the char, and congenerous both in form and habits.—*Sir H. Davy.*

Umbles, *s.* A deer's entrails.

Under Tail Coverts, *s.* Those feathers immediately covering the base of the tail beneath.

Under Wing Coverts, *s.* Those feathers covering the wing underneath.

Unearthed, *a.* Driven from the ground. To unearth a fox, is to force him from his den.

Unfledged, *a.* That has not yet the full furniture of feathers, young.

Unfleshed, *a.* Not fleshed, not seasoned to blood.

Upper Tail Coverts, *s.* Those feathers immediately covering the base of the tail feathers.

Volant, *a.* Flying, passing through the air; active.

Vole, *s.* A deal at cards that draws the whole tricks.

Volery, *s.* A flight of birds.

Volley, *s.* A flight of shot; an emission of many at once.

Volt, *s.* A round or a circular tread; a gait of two treads made by a horse going sideways round a centre.

Vomica, *s.* An encysted humour in the lungs.

Vomit, *v.* To cast up the contents of the stomach.

Vomit, *s.* The matter thrown up from the stomach; an emetic medicine.

Vomitory, *a.* Procuring vomits, emetic.

Voracious, *a.* Greedy to eat, ravenous.

Voracity, *s.* Greediness, ravenousness.

URETHRA, *s.* The passage of the urine.
URINARY, *a.* Relating to the urine.
URINE, *s.* Animal water.

Inflammation of the kidneys is generally caused by riding or driving a horse immoderately, by straining the loins, in making him draw heavy loads or carry heavy burthens; or they may become inflamed in consequence of peritonæal inflammation of the bowels. In either case breed freely, or to faintness; cover the loins with a fresh sheep skin, the flesh side under, having first rubbed on them some warm embrocation, such as hartshorn and oil, with a little oil of turpentine, or the following embrocation. Open the bowels with a dose of castor oil and clysters of warm water, with a small quantity of salt and oil, or hog's lard. I should first have noticed, however, the symptoms of the disorder, which are, a constant desire to make water, without being able to void any, or scarcely any: and the little that is discharged is dark coloured or bloody. There is great stiffness of the hind parts, generally more observable in one leg than the other. The horse often stands straddling or wide, as if in want to make water, and every now and then straining, or making painful and ineffectual efforts to stale. This appearance often leads the groom to think that it is a stoppage of water, and that a diuretic is necessary; but the fact is, that the dark-coloured or bloody urine is so stimulating or acrimonious that the bladder contracts violently in order to force out the smallest quantity that gets into it.

The disorder I have now been describing may happen in various degrees, but still the treatment is the same. It sometimes happens, however, that the urine becomes foul and stimulating from high feeding, or foul and unwholesome feeding. In this case the bladder will contract upon a small quantity of urine, and the urine may be rather high coloured, like beer, or turbid, like whey, and the horse may appear to strain a little in voiding it; but this is very different from those distressing symptoms which attend inflammation of the kidneys, nor is it accompanied with loss of appetite, or any degree of fever, which is always present in inflammation of the kidneys. When the urine becomes thus stimulating, some cold mashes, with a little nitre, may be given, or what is still better, perhaps, some grass, vetches, or lucern. If the horse is at all costive, a clyster should be thrown up. An infusion of linseed is a good drink for a horse when the urine is in this state.

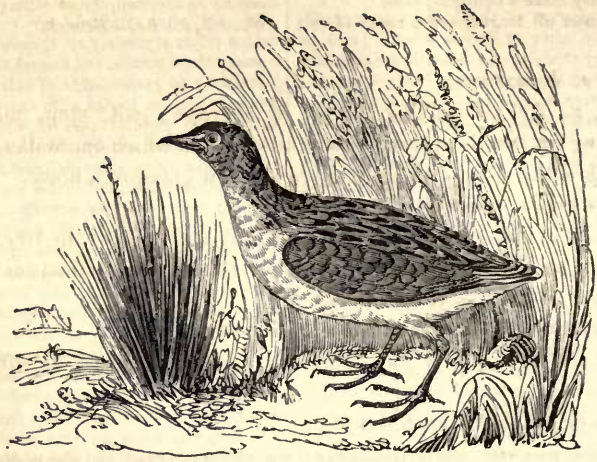
The improper manner in which horses are generally fed, the early age at which they are worked, and the immoderate degree in which they are often worked, are circumstances which either separately or conjointly tend to weaken the stomach, and disturb the digestive functions; in consequence of this the blood becomes foul, or loaded with excrementitious matter, the greatest part of which, in the horse, is carried off by the kidneys. This renders the urine more acrimonious than it would otherwise be, and causes the bladder to contract upon a smaller quantity. We may often observe, also, how the urinary passages are stimulated by such urine, making mares appear as if they were horsing, and causing an erection in geldings. As the horse is often staling in this case, and voiding but a small quantity, and appearing as if he was endeavouring to void more, it is often mistaken for a stoppage in the water, as it is termed, and diuretics are generally given, which, if not too strong, may be of service. But the best plan is to keep the horse on bran mashes chiefly for a few days, and give twice a day, for two or three days, the following powder:—

Nitre . . . 3 or 4 dr.
Carbonate of soda . 1 dr. or chalk 2 dr.
Mix for one dose.

Or, No. 2, Nitre, powdered resin, chalk, and levigated antimony, of each two drachms. —Mix for one dose.

If these powders appear to disagree with the stomach they should be discontinued: in such cases the cordial diuretic is more likely to do good, such as has been prescribed for asthmatic affection or broken wind.

Retention of urine, strangury, or stoppage of water, may be caused by inflammation and swelling of the neck of the bladder; and this may be brought on by a peculiar acrimony in the urine, such as that produced by cantharides when taken as medicine. The different species of pepper, or grains of paradise, may produce some effect of this kind. The neck of the bladder may be pressed down upon the pubis by an accumulation of dung in the rectum, so as to stop the passage completely. A clyster is always proper on these occasions, for if an accumulation of dung be the cause, it will be speedily removed. But there will be some difficulty in giving the clyster, unless some of the hard dung is first taken out with the hand. The neck of the bladder may be so affected with spasm as to confine the urine. This may be the cause of the stoppage of water that happens in flatulent colic, but I rather think it depends entirely upon an accumulation of dung in the bowels, therefore I always prescribe a clyster in colic, of whatever kind it may be.—*Blaine.*



WATER CRAKE.

WADDING, *s.* That substance which secures the powder and shot in loading a gun.

Wadding.—Paper not being stiff enough, hat dirty, card too thin, and leather apt to soften with the heat of the barrel, the common, and perhaps the best punched wadding is pasteboard. The larger the bore, the thicker should be the wadding, which may be got to any size, among the discarded cuttings of a book-binder.

Nothing is better to punch your wadding on than a round block, sawed out of some close grained kind of wood; such as beech, chestnut, lime, sycamore, &c. Lead is improper, as it wears out the punch.

Be careful not to let your wadding get damp, or in drying it may shrink so much as to become too small for the calibre of your gun.

* * *

In countries where orchards abound, a very fine moss, of greenish grey colour, is found adhering to the apple-trees, which is extremely proper for wadding, and which even possesses the extraordinary quality of making the barrel less greasy and foul than paper, which always contains a certain quantity of oil.—*Hawker —Essay on Shooting.*

WADE, *v.* To walk through the waters, to pass waters without swimming.

WADERS, *s.* A class of waterfowls.

WAGER, *s.* A bet, anything pledged upon a chance or performance.

WAGER, *v.* To lay, to pledge as a bet.

WAGTAIL, *s.* A bird.

The species of this kind are few, and these are chiefly confined to the continent of Europe, where the individuals are numerous.

They are easily distinguished by their brisk and lively motions, as well as by the great length of their tails, which they jerk up and down incessantly, from which circumstance they derive their name. They do not hop but run along the ground very nimbly after flies and other insects, on which they feed: they likewise feed on small worms, in search of which they are frequently seen to flutter round the husbandman whilst at his plough, and follow the flocks in search of the flies which ge-

nerally surround them. They frequent the sides of pools, and pick up the insects which swarm on the surface. They seldom perch; their flight is weak and undulating, during which they make a twittering noise.

In almost all languages the name of this bird is descriptive of its peculiar habits. In Latin, motacilla; in French, motteux, la lavandière, or washer; in England, they are sometimes called washers, from their peculiar motion; in German, brook-stilts; in Italian, shake-tail, &c. &c.—*Bewick.*

WAIN, *s.* A carriage.

WALK, *s.* Act of walking for air or exercise; gait, step, manner of moving; a length of space, or circuit through which one walks; a fish: *Walk* is the slowest or least raised pace, or going of a horse.

WALL-EYED, *a.* Having white eyes.

WALNUT, *s.* The name of a tree; the fruit and wood of the tree.

WANDER, *v.* To rove, to ramble here and there, to go without any certain course; to deviate, to go astray.

WANDERER, *s.* Rover, rambler.

WARBLE, *v.* To quaver any sound; to cause to quaver; to utter musically.

WARBLER, *s.* A singer, a songster.

This very numerous class is composed of a great variety of kinds, differing in size from the nightingale to the wren, and not a little in their habits and manners.

They are widely dispersed over most parts of the known world; some of them remain with us during the whole year; others are migratory, and visit us annually in great numbers, forming a very considerable portion of those numerous tribes of singing birds, with which this island so plentifully abounds. Some of them are distinguished by their flying, which they perform by jerks, and in an undulating manner; others by the whirring motion of their wings. The head in general is small; the bill is weak and slender, and beset with bristles at the base; the nostrils are small and somewhat depressed; and the outer toe is joined to the middle one by a small membrane.—*Bewick.*

WARDEN, *s.* A forest officer. The chief warden of the forest is a great officer, next to the justices of the forest, to bail and discharge offenders, but he is no judicial officer.

WARN, *v.* To caution against any fault or danger; to give previous notice; to admonish to any duty to be performed; to warn off trespassers from a manor.

WARP, *v.* To contract, to shrivel; to turn aside from the true direction.

WARREN, *s.* A kind of park for rabbits.

WARRENER, *s.* The keeper of a warren.

WART, *s.* A corneous excrescence, a small protuberance on the flesh.

WARTY, *a.* Grown over with warts.

WASH, *s.* Alluvion, anything collected by water; a bog, a marsh, a fen, a quagmire; a medical or cosmetic lotion; a superficial stain or colour.

WASP, *s.* A brisk stinging insect, in form resembling a bee. *Vide* ADDER.

Abundance of wasps are said to denote a good fruit year. We have remarked also the converse of this, for in the present season, 1824, perhaps the worst for apples and stone fruit that we remember, there is scarcely a wasp to be seen. In general towards the

close of summer they are very numerous, particularly in the month of September. In 1821 they were prodigiously plentiful, and in 1822 there were a great many of them, while 1824 scarcely presented a solitary wasp, even where they usually abound.—*Foster.*

WATER, *s.* One of the four elements; the sea; urine; *to hold water*, to be sound, to be tight; it is used for the lustre of a diamond.

Water varies considerably in its qualities and temperature. In deep wells it rarely changes from 40° of Fahrenheit, while in exposed streams and lakes, there may be a variation of from 12 to 16 degrees. Much, consequently, depends upon the watering of horses, in quality, quantity, and temperature. Horses, if they be not violently exercised, cannot be too frequently watered.

* * *

Water Birdlime.—Procure the strongest and best of birdlime possible, and wash it in clear spring water till you perceive the hardness is completely removed, and the lime has become very pliable: then squeeze or beat out the water remarkably well, till you cannot observe a single drop; dry it well: after this, put it into an earthen pot, and mix with it the fat of fowls, unsalted, as much as will make it run; then add two table spoonfuls of strong vinegar, a table spoonful of the best salad oil, and a small quantity of Venice turpentine. This is the quantity of ingredients which must be added to every pound of strong birdlime. Having thus mixed them, boil them all gently together over a small fire, stirring the whole continually till the mixture is complete, when it may be taken from the fire and suffered to cool. When at any time you have occasion to use it, warm it and then anoint your twigs or straws, or any other small things, and water will not take away the strength of it. This sort of birdlime is well calculated for snipes, &c.—*Gamekeeper's Directory.*

WATER, *v.* To irrigate, to supply with moisture; to supply with water for drink.

WATER CRAKE, SPOTTED RAIL, LESSER SPOTTED WATER RAIL, SKITTY, or SPOTTED GALLINULE, (*Rallus porcana*, LINN.; *La Marouette*, BUFF.) *s.*

This bird weighs about four ounces, and measures nearly nine inches in length, and about fifteen in breadth. The bill is of a greenish-yellow, and not more than three quarters of an inch long. The top of the head, to the nape, is dusky, and slightly streaked with rusty-brown; a brown and white mottled stripe passes from the bill over and behind the eyes; the cheeks and throat are of a freckled dull grey. The neck and breast are olive, marked with small white spots; the sides dusky and olive, crossed with bars of white, and the under parts are a mixture of cinereous, dirty and white yellow. The colour of the plumage of all the upper parts is dusky and olive-brown, spotted, edged, barred or streaked with white; the spots on the wing-coverts are surrounded with black, which gives them a studded or pearly appearance; and the white bars and streaks on the scapulars and tertials form a beautiful contrast to the black ground of the feathers on these parts. The legs are of a yellowish-green. The water-crake in its figure and general appearance, though much less, is extremely like the corn-crake or land-rail; but its manners and habits are very different. Its common abode is in low, swampy grounds, in which are pools or streamlets, overgrown with willows, reeds, and rushes, where it lurks and hides itself with great circumspection; it is wild, solitary, and shy, and will swim, dive, or skulk under any cover; and sometimes it is said, will suffer itself to be knocked on the head, rather than rise before the sportsman and his dog. This species is very scarce in Great Britain, and from its extreme vigilance it is rarely to be seen. It is supposed to be migratory here, as well as in France and Italy, where it is found early in the spring; it is also met with in other parts of Europe, but no where in great numbers. The conformation of its nest is curious; it is made of rushes and other light, buoyant materials, woven and matted together, so as to float on, and to rise or fall with the ebbing or flowing of the water, like a boat; and to prevent its being swept away by floods, it is moored or fastened to the pendent stalk of one of the reeds, by which it is screened from the sight, and sheltered from the weather. The female lays from six to eight eggs. The young brood do not long require the fostering care of the mother, but as soon as they are hatched, the whole of the little black shapeless family scramble away from her, take to the water, separate from each other, and shift for themselves. The flesh is said to have a fine and delicate flavour, and is esteemed by epicures a delicious morsel.—*Bewick.*

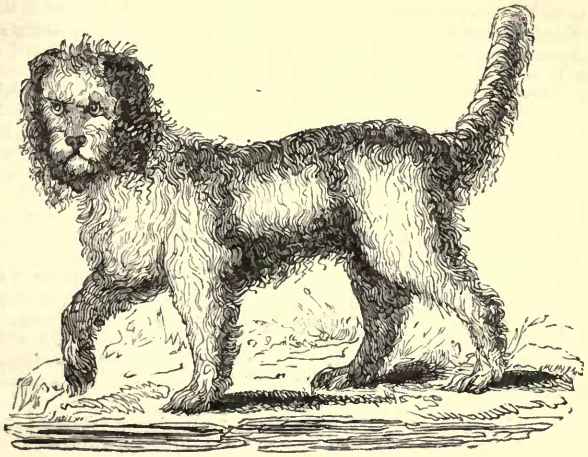
WATERCRESSES, *s.* A plant. There are five species.

WATER CRICKET or CREEPER, *s.* A cricket used as bait for fish.

It is an error to suppose this the same as the cad bait, for though generally found by the water side, the latter is always in some kind of husk, the creeper never, nor has ever wings, and cannot therefore be the stone-fly; it may be kept in the same way as the cadis.

They may be kept in a large horn, like that for powder, with gravel at the bottom, and some holes at the sides to admit air: the mouth of the horn should be wide enough to receive a quart bottle cork, and should be placed in water with the creepers, when not using them.—*Daniel.*

WATER DOG, *s.* A rough and web-footed spaniel.



The Great Rough Water Dog. (*Canis Aquaticus*, LINN.)—The great rough water dog has long curly hair, is web-footed, swims with great ease, and is extremely useful in the sport of shooting aquatic birds. He has many of the qualities of the land spaniel.

This dog has a great liking to fetching and carrying, and such is his exquisite sense of smell, that he will find a particular stone thrown by his master to the bottom of a river: he dives with astonishing dexterity. He is particularly valuable on board of ships, as he leaps from the side of a vessel after any article which has fallen overboard, and is very useful for recovering birds that have been shot from the deck of the ship. Above all, he is lively, playful, good-tempered, and much attached to to his master.

Large Water Spaniel. (*Canis Inquisitor.*)—The large water spaniel is about the size of an ordinary setter, but much stronger in the bone and shorter in the legs. His head is long, his muzzle moderately acute, and his face is quite smooth, as well as the front of all his legs; his ears are long, which, together with his whole body, is covered with deep hair, consisting of firm, small, and distinctly crisped curls, not unlike those of a wig, his tail is rather short, and clothed with curled hair. His hair is very differently curled from the great water dog and poodle, as that of the two latter consists of long and pendulous curls. His general colour is a dark liver-brown, with white legs, neck, and belly; and is sometimes, though rarely to be met with, all black, or with a black body and white neck and legs.

His smell is extremely acute, and he has in some instances been taught to set, but this is rather a difficult task, from his naturally lively disposition. He takes the water with great eagerness, on which account he is a valuable dog in shooting wild fowl; he watches with much keenness and anxiety the motions of his master, and as soon as the bird is killed he instantly plunges into the water, fetches it out, and lays it at the feet of his master. He is very quick at finding the haunts of wild fowl; he is also easily taught to fetch and carry articles, and will seek things which have been lost, on which account he has received in England the appellation of the finder.

The great water spaniel has sometimes been

employed in otter hunting, but it is seldom he has the pluck to combat with so keen an adversary. He is an animal naturally distinguished for mildness and docility, qualities which are pourtrayed in his countenance, and is remarkable for his attachment to his master.

The native country of this dog is Spain; but we conceive that the variety we possess, which is a very distinct one, is not the pure breed as originally imported into this country, but that it is the produce of the large water dog and the English setter, as it appears to be intermediate between these, not only in figure, but also in their united qualities.

The Small Water Spaniel, or Poodle. (*Canis Aquaticus minor.*)—This variety is presumed to be the offspring of the large water dog and the small cocker; it has all the appearance of the former, not only in shape, but also in the thick curled silky hairs. It is a most lively active dog, with an acute sense of smell, and is very susceptible of instruction of almost every kind. Its general colour is white, although individuals are sometimes found with black patches over various parts of their bodies. The poodle is very fond of diving, and can find at the bottom of a river or pond any particular stone thrown in by his master.

In France this dog is a great favourite, and is taught many curious tricks. He is an excellent companion in shooting of wild fowl, which, when killed in the water, he very soon recovers.

Some dogs are more easily instructed than others, though all are sufficiently docile. The poodle breed is the most extraordinary for aptitude in this particular; many have been made so useful as to perform the common offices of a servant, such as to go on ordinary errands, shut and open doors, ring bells, &c. and their knack at mimicry is extreme.

* * *

I have tried poodles, but always found them inferior in strength, scent, and courage. They are also very apt to be sea-sick. The Portland dogs are superior to them.

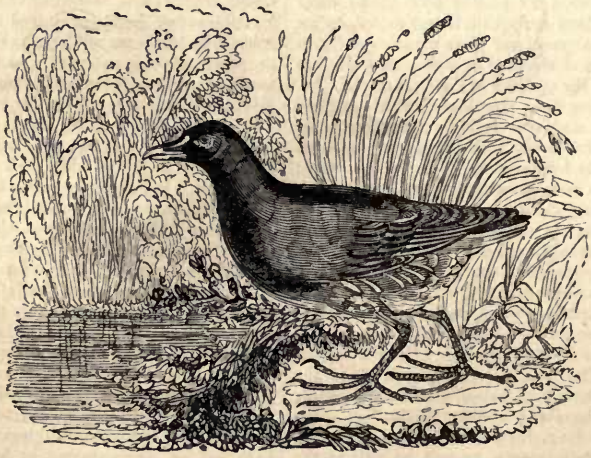
A water-dog should not be allowed to jump out of a boat, unless ordered so to do, as it is not always required, and therefore needless that he should wet himself and every thing about him without necessity.

For a punt or canoe, always make choice of the smallest Newfoundland dog that you can procure; as the smaller he is the less water he brings into your boat after being sent out; the less cumbersome he is when afloat; and the quicker he can pursue crippled birds upon the mud. A bitch is always to be preferred to a dog in frosty weather, from being, by nature, less obstructed in landing on the ice.

If, on the other hand, you want a Newfoundland dog only as a retriever for covert shooting, then the case becomes different; as here you require a strong animal, that will easily trot through the young wood and high grass with a large hare or pheasant in his mouth.—*Brown—Hawker.*

WATER FOWL, *s.* Fowl that live or get their food in water.

WATER HEN, COMMON GALLINULE, or MOORHEN, (*Fulica chloropus*, LINN.; *La Poule d'Eau*, BUFF.) *s.*



The weight of this bird varies from ten and a half to fifteen ounces; the length from the tip of the beak to the end of the tail is about fourteen inches, the breadth twenty-two; the bill

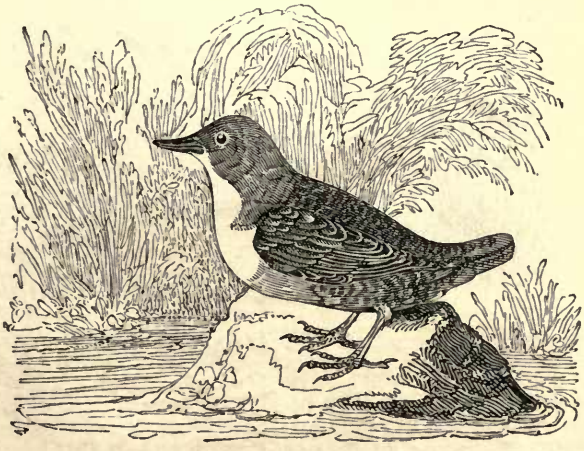
is rather more than an inch long, of a greenish yellow at the tip, and reddish towards the base, whence a singular kind of horny or membranous substance shields the forehead as far as the eyes; this appendage to the bill is as red as sealing-wax in the breeding season; at other times it varies or fades into a white colour. The head is small and black, except a white spot under each eye, the irides which are red; all the upper part of the plumage is of a dark shining olive green, inclining to brown; the under parts are of a dark hoary lead colour; vent feathers black; those on the belly and thighs tipped with dirty white; long loose feathers on the sides, which hang over the upper part of the thighs, are black, streaked with white; the ridge of the wing, outside feathers of the tail, and those underneath, are white; the upper bare part of the thighs is red; from the knees to the toes, the colours are different shades, from pale yellow to deep green; the toes are very long, the middle one measuring to the end of the nail, nearly three inches; their undersides are broad, being furnished with membranous edgings their whole length on each side, which enable the bird to swim, and easily run over the surface of the slimy mud by the sides of the waters where it frequents.

The female makes her nest of a large quantity of withered reeds and rushes, closely interwoven, and is particularly careful to have it placed in a most retired spot, close by the brink of the waters, and it is said, she never quits it without covering her eggs with the leaves of the surrounding herbage. Pennant and Latham say, she builds her nest upon some low stump of a tree, or shrub, by the water side; no doubt she may sometimes vary the place of her nest, according as particular circumstances may command, but she generally prefers tho other mode of building it. She lays six or seven eggs at a time, and commonly has two hatchings in a season. The eggs are nearly two inches in length, and are irregularly and thinly marked with rust-coloured spots on a yellowish white ground. The young brood remain but a short time in the nest, under the nurturing care of the mother, but as soon as they are able to crawl out they take to the water, and shift for themselves.

Although the water-hen is nowhere very numerous, yet one species or other of them is met with in almost every country in the known world. It is not yet ascertained whether they ever migrate from this to other countries, but it is well known that they make partial flittings from one district to another, and are found in the cold mountainous tracts in summer, and in lower and warmer situations in winter.

On examination of several specimens of this bird, in full feather, they were found, like most birds of plain plumage, very little different from each other.—*Bewick.*

WATER OUSEL, WATER CROW, DIPPER, or WATER PIOT, (*Sturnus Cinclus*, LINN, ; *Le Merle d'Eau*, BUFF.) *s.*

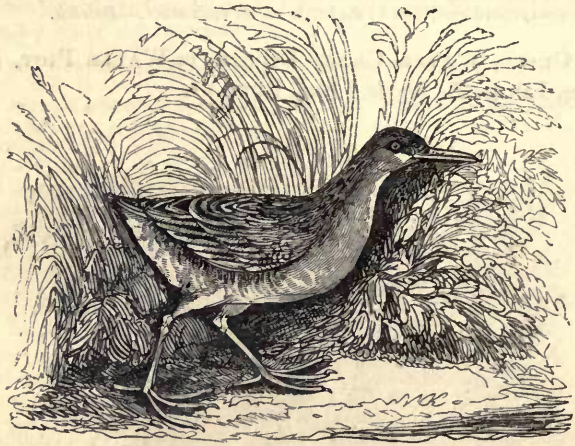


The length of the water ousel is about seven inches and a half from the point of the beak to the end of its tail, which is very short, and gives the bird a thick and stumpy appearance.

The mouth is wide; the bill black, about three quarters of an inch long; the upper mandible rather hollow in the middle and bent a little downwards at the point; the eyelids are white, and irides hazel. The upper parts of the head and of the neck are of a deepish rusty-brown; the back, rump, scapulars, wing coverts, belly, vent, and tail are black; but each feather on these parts is distinctly edged with a hoary grey colour. The breast, forepart of the neck, and throat, are of a snowy white; and the black and white on the belly and breast are separated by a rusty brown. The legs and toes are short and strong, the scales pale blue, the hinder part and joints brown; the claws are curved, and the toes are distinctly parted without any membranous substance between to join them.

This solitary species is removed from the place it has hitherto holden in all systems among the land birds: it ought not to be classed any longer with the ousels and thrushes, to which it bears no affinity. Its manners and habits are also different from those birds, and are peculiar to itself. It is chiefly found in the high and mountainous parts of the country, and always by the sides of brooks and rocky rivers, but particularly where they fall in cascades, or run with great rapidity among stones and fragments of broken rocks; there it may be seen perched on the top of a stone in the midst of the torrent, in a continual dipping motion, or short courtesy often repeated, whilst it is watching for its food, which consists of small fishes and insects. The feathers of this bird, like those of the duck tribe, are impervious to water, whereby it is enabled to continue a long time in that fluid without sustaining the least injury. But the most singular trait in its character, (and it is well authenticated) is that of its possessing the power of walking, in quest of its prey, on the pebbly bottom of a river, in the same way, and with the same ease, as if it were on dry land. The female makes her nest in the banks of the rivulet, of the same kind of material, and nearly of the same form as that of the common wren; and lays four or five eggs, which are white, lightly blushed with red.—*Bewick.*

WATER RAIL, BILCOCK, VELVET-RUNNER, or BROOK OUSEL (*Rallus Aquaticus*, LINN.; *Le Rale d'Eau*, BUFF.) s.



This bird, though a distinct genus of itself, has many traits in its character very similar to both the corn crake and the water crake; it is migratory, like the former, to which it also bears some resemblance in its size, its long shape, and in the flatness of its body: its haunts and manner of living are nearly the same as those of the latter; but it differs from both in the length of its bill, and its plumage. It weighs about four ounces and a half, and measures twelve inches in length and sixteen in breadth. The bill is slightly curved, and one inch and three quarters long: the upper mandible is dusky, edged with red; the under reddish orange; the irides red. The top of the head, hinder part of the neck, back, scapulars, coverts of the wings and tail are black; edged with dingy brown. The ridge of the

wings is white, the bastard wing barred with white, the inside barred with brown and white, and the quills and secondaries dusky. The side feathers are beautifully crossed with black and white, and slightly tipped with pale reddish brown. The inner side of the thighs, the belly, and the vent are pale brown, and in some specimens specked with bluish ash. The sides of the head, chin, forepart of the neck, and breast, are of a dark hoary lead colour, slightly tinged with pale rufous. The tail consists of twelve short black feathers, edged and tipped with dirty red; some of those on the under side barred with black and white. The legs which are placed far behind, are a dull dirty red; the toes long and without any connecting membrane. Latham says, "the eggs are more than an inch and a half long, of a pale yellowish colour, marked all over with dusky brown spots, nearly equal in size, but irregular."

The water rail is a shy and solitary bird. Its constant abode is in low wet places, much overgrown with sedges, reeds, and other coarse herbage, among which it finds shelter, and feeds in hidden security. It runs, occasionally flirting up its tail, through its tracks, with the same swiftness as the corn crake runs through the meadows and cornfields, shows as great an aversion to take flight as that bird, and has more of the means in its power of disappointing the sportsman. It generally exhausts his patience, and distracts and misleads his dog, by the length of time to which it can protract its taking wing: and it seldom rises until it has crossed every pool, and run through every avenue within the circuit of its retreats. It is, however, easily shot when once flushed, for it flies but indifferently, with its legs dangling down while on the wing. This bird is not very common in Great Britain, but is said to be numerous in the marshes of the northern countries of Europe, whence, partially and irregularly, it migrates southward, even into Africa, during the severity of the winter season. Buffon says, "they pass Malta in the spring and autumn," and to confirm this, adds, "that the Viscount de Querhoent saw a flight of them at the distance of fifty leagues from the coasts of Portugal, on the 17th of April, some of which were so fatigued that they suffered themselves to be caught by the hand." The flesh of the water rail is not so generally esteemed as that of the land rail, and yet by many it is thought rich and delicious eating.—*Bewick.*

WATER RAT, *s.* A rat that makes holes in banks.

I suspect much there may be two species of water-rats. Ray says, and Linnæus after him, that the water-rat is web-footed behind. Now I have discovered a rat on the banks of our little stream that is not web-footed, and yet is an excellent swimmer and diver.

Habits of the Water Shrew and Water Rat.—The brown rat (*Mus decumanus*) frequents water and is fond of swimming, though it does not willingly dive. The water rat (*Arvicola aquatica*, FLEMING,) again, which is the one alluded to by White, swims as readily below as above water, and feeds chiefly on the roots of water plants. White was near the truth in supposing two species of water rats, inasmuch as he was not acquainted with the water shrew (*Sorex ciliatus*, SOWERBY), so well described by Mr. Dovaston of Shrewsbury in the Magazine of Natural History. "I repeatedly," he says, "marked it glide from the bank under water, and bury itself under the mass of leaves at the bottom. It very shortly returned and entered the bank, occasionally putting its long sharp nose out of the water and paddling close to the edge. This it repeated at very frequent intervals, from place to place, seldom going more than two yards from the side, and always returning in about half a minute. I presume it sought and obtained some insect or food among the rubbish and leaves, and retired to consume it. Sometimes it would run a little on the surface, and sometimes timidly and hastily come on shore, but with the greatest caution, and instantly plunge in again. When under water he looks gray, on account of the pearly cluster of minute air bubbles that adhere to his fur and bespangle him all over. He only appears at evening, and such is his general habit. Once, however, at broad and bright noon, while leaning on a tree gazing on the sun sparkles, like fairy lights, in numberless and eternal succession under the gentlest breath of air, I was aware of my little friend running nimbly on the surface among them. My rapture caused me to start with delight, on which he vanished to security within his rush-fringed bank."

* * *

During summer they reside principally in holes on the banks of rivers, ditches, and ponds; but, as winter comes on, they approach the human habitations, and very often take up their abode in barns, corn-stacks, &c. They have haunts or runs in the walls and under the floors of old houses, where they frequently injure the furniture; and they have been known to gnaw the extremities of infants while asleep. They swim with ease, and will dive after fish.

Rats increase very fast; they will bring forth three times a year, and produce from ten to fifteen at a birth. They are numerous in most large towns; and though they seek the

fields on the approach of summer, it generally arises from a diminution of food about farm-houses, &c., as well as from the insecurity which they feel from the removal of the corn-stacks, the clearing of the barns, &c., at the same time that plenty of food is presented abroad in the fields. When a colony of these animals happens to take possession of a field of standing corn, they make dreadful havoc.

These animals will attack young poultry, and even the old, if pressed by hunger; and their voracity is such that they have been known to fasten on the fatter parts of living swine; nor are infants in their cradle always free from their attacks. They will destroy young game, and indeed the rat may be regarded as a general marauder.

Rats become uncommonly bold from impunity, but they are easily destroyed or driven away when proper means for that purpose are adopted. There are various methods of taking or destroying these creatures, the most effective of which will be detailed.

The weasel tribe pursue the rat as fiercely as the hare; but the rat, unlike "the poor timid hare," does not resign itself to its fate; it is interesting to see the small weasel attack a large rat. The latter will get away, if possible; but finding escape out of the question, it turns upon its invincible assailant and fights while it is able, crying out all the time. From the active motions of the rat in this contest, as well as from its evident superiority in strength, a spectator might suppose that the business must end in the defeat or destruction of the weasel; but, after a time, the efforts of the rat evidently grow languid, while the weasel may be perceived sticking like a leech, its teeth fast hold of the rat about the head or neck. The battle lasts no great length of time; for when once the weasel has got hold, all the efforts of the rat are not sufficient to dislodge it.

The ferret, it is well known, is in general use for the destruction of rats, assisted by the terrier; and this was a kind of business or employment followed by numbers throughout the country.—*White's Selborne*—*Gamekeeper's Directory.*

WATTLE, *s.* The barbs, or loose red flesh that hangs below the cock's bill; a hurdle.

WAX, *s.* The thick tenacious matter gathered by the bees; any tenacious mass, such as is used to fasten letters; the substance that exudes from the ear.

In this country, one hundred pounds of honey-comb will yield from three to five or six pounds of wax; in some of the southern countries nearly double that quantity. Transparent white honey is to be preferred to the higher coloured; new to old, and that of the spring to the summer or autumnal honey.

The wax being crumbled or pressed, must be boiled in water, and then strained from bags into a tub of water. The water being strained when the wax is cold, it may be collected, boiled, and when cool, will be found in a cake on the surface. It is refined by repeated boilings in fair water.—*Moubray.*

WAX, *v.* To smear, to join with wax.

WEALD, *s.* A wood, a grove. Old Saxon.

WEAN, *v.* To put from the breast; to withdraw from any habit or desire.

WEANLING, *s.* An animal newly weaned.

WEASEL, *s.* A small animal that eats corn and kills rats and mice.

The hare has no enemy more fatal than the weasel, which will follow and terrify it into a state of absolute imbecility, when it gives itself up without resistance, at the same time making piteous outcries. The weasel seizes its prey near the head: the bite is mortal, although the wound is so small that the entrance of the teeth is scarcely perceptible; a hare or rabbit bit in this manner is never known to recover, but lingers for some time and dies.

The common weasel is the least animal of this species; the disproportionate length and height of the little animals which compose this class are their chief characteristics, and are alone sufficient to distinguish them from all other carnivorous quadrupeds; the length of the wolf, in proportion to its height, is as one and a half to one; that of the weasel is nearly as four to one. The weasel never exceeds seven inches in length from the nose to the tail, which is only two inches and a half long, ends in a point, and adds considerably to the apparent length of the body; the height of the weasel is not above two inches and a half, so that it is almost four times as long as it is high; the most prevailing colour is a pale

tawny brown, resembling cinnamon, on the back, sides, and legs; the throat and belly white; beneath the corners of the mouth on each jaw is a spot of brown; the eyes are small, round, and black; the ears broad and large, and from a fold at the lower part have the appearance of being doubled; it has likewise whiskers like a cat, but has two more teeth than any of the cat kind, having thirty-two in number, and these well adapted for tearing and chewing its food. The motion of the weasel consists of unequal bounds or leaps, and in climbing a tree it gains a height of some feet from the ground by a single spring; in the same precipitate manner it jumps upon its prey, and possessing great flexibility of body, easily evades the attempts of much stronger animals to seize it. We are told that an eagle, having pounced upon a weasel, mounted into the air with it, and was soon after observed to be in great distress; the little animal had extricated itself so much from the eagle's hold as to be able to fasten upon the throat, which presently brought the eagle to the ground, and gave the weasel an opportunity of escaping. Its activity is remarkable, and it will run up the sides of a wall with such facility that no place is secure from it. The weasel also preys in silence, and never utters any cry except when it is struck, when it expresses resentment or pain by a rough kind of squeaking. It is useful to the farmer in winter by clearing his barns and granaries of rats and mice.

The weasel sleeps in its hole during the greater part of the day, and evening is the chief time when it begins its depredations; it may then be seen stealing from its retreat, and creeping about in search of prey, which extends to all the eggs it can meet with, and it not unfrequently destroys the bird that tries to defend them. If it enter the hen-roost the chickens are sure to fall victims; it does not there often attack the cocks or old hens, nor does it devour what it kills on the spot, but drags it off to eat at leisure.

* * *

Ferocity of Weasels.—In the month of December, 1817, in the parish of Glencairn, a labourer was suddenly attacked by six weasels, which rushed upon him from an old dyke, in the field where he was at work. The man alarmed at such a furious onset from an unprovoked enemy, instantly betook himself to flight, in which, however, he was closely pursued, and although he had about him a large horsewhip, with which he endeavoured by several back hand strokes to stop them, yet so eager was their pursuit, that he was on the point of being seized by the throat, when he luckily noticed at some distance, the fallen branch of a tree which he made for, and hastily snatching it up, commenced in turn the attack with so much success, that he killed three of them, and put the remaining three to flight. The man's life was in great danger, when it is ascertained that two weasels are a match for a dog.

Weasand, *s.* The windpipe, the passage through which the breath is drawn and emitted.

Weather, *s.* State of the air, respecting either cold or heat, wet or dryness; the change of the state of the air; tempest, storm.

Effect of Weather in water shooting.—Fog, snow, or any other hazy weather, is very bad, as it makes every thing on the water appear large and black, and then it is that these birds (and indeed all others) soon take alarm. The novice fancies just the reverse. Fog in the fens and marshes, however, is sometimes the best weather, although quite the reverse on the sea.

Bright starlight is the very best of all times for getting at birds, as the tide flows over the mud; particularly if there is a little breeze, without wind enough to blacken the shallow water. If a cold black frost, so much the better.

Even in moonlight wigeons are easier approached than in hazy weather. In white frosts wigeons are often restless. In rain they are constantly flying and pitching. In very dark weather they are suspicious, and more on the watch than in starlight; but, if the wind blows fresh enough to drown the noise of a launching punt, some "heavy shots" may now and then be made by sweeping the surface of the mud to the sound where the flock is walking and feeding. This may sometimes be within thirty yards of the "launcher." In mild weather, wigeons are generally scattered about like rooks, till after midnight, unless they become concentrated by the flow of the surrounding tide. But in cold weather they sit thick together.

The first night or two of thaw, after a sharp frost, is the best opportunity for this sport.—*Hawker.*

Web, *s.* Texture, anything woven; a kind of dusky film that hinders the sight; the film or skin that connects the toes of water fowls and dogs.

Webbed, *a.* Joined by a film.

Webfooted, *a.* Having films between the toes.

Weight, *s.* Quantity measured by the balance; a mass by which, as the standard, other bodies are examined; ponderous mass; gravity, heaviness, tendency to the centre.

Weight for Inches.—It may prove a matter of intelligence to those persons unconnected with the movements and terms of the sporting world, to understand that the graduated scale for a match, when made for two or more horses to run and carry weight for inches, is thus: that horses measuring fourteen hands high are to carry nine stone, above or below which height they are to carry seven pounds more or less, for every inch they are higher or lower than the fourteen hands fixed as the criterion.

Example.—A horse measuring fourteen hands, one inch and a half, (four inches making one hand) will carry nine stone, ten pounds, eight ounces; a horse measuring thirteen hands, two inches and a half, will carry only eight stone, three pounds, eight ounces; the former being one inch and a half above the fourteen hands, the other one inch and a half below it; the weight is therefore added or diminished by the height of every inch higher or lower.

* * *

Whatever might have been the original intention of cocktail racing (and I have no doubt it was very laudable) it has become a regular and well-organised system of swindling and fraud. It behoves every gentleman and man of honour connected with the turf to discountenance it; and if stakes "for horses not thorough-bred" cannot be immediately expunged from every race list, a salutary check may easily be put upon it by weighting the winners in such a manner as could not fail to bring them to the proper level. Weight must and will always tell; and by this means an effectual bridle would be placed upon these nefarious cocktails at the commencement of their career. Even in regard to the age of these suspicious cocktails, that is often rendered a doubtful circumstance, as all the trickery and cunning of the men who own them are put in practice to accomplish their purpose in this respect. From information which I have no reason to doubt, a cocktail from the north, which has repeatedly won during the present season (1829) has been running as a year younger than the correct age; add to this also, little doubt can exist of the animal being as thorough-bred as any racer in the kingdom. Moreover, to say nothing of the immediate and obvious turpitude of the system of cocktail racing, it is productive of continual and never-ending disputes.—*Turf Expositor.*

Welsh Pony, *s.*

The ponies of Wales seem to be original and unmixed. They are much esteemed for the neatness and beauty of their forms, for the nimbleness of their motions, and, above all, for being remarkably surefooted on the most difficult roads, which renders them extremely valuable in the mountainous tracts to which they originally belong. In point of size and hardiness, they bear a near resemblance to the best of the native breed of the Highlands of Scotland, and other hilly countries in the north of Europe. These animals are too small for the two horse ploughs now in use, but few horses are equal to them for enduring fatigue on the road.

"I well remember," says Cully, "one that I rode for many years, which, to the last, would have gone on a pavement in preference to a softer road."—*Le Keux.*

Wheal, *s.* A pustule, a small swelling filled with water.

Wheat, *s.* The grain of which bread is chiefly made.

Wheaten, *a.* Made of wheat.

Wheatear, *s.* A small bird very delicate.

Wheel, *s.* A circular body that turns round upon an axis; a circular body, a carriage that runs upon wheels; rotation; a compass about, a track approaching to circularity.

Whelp, *s.* The young of a dog, a puppy; the young of any beast of prey.

Whelp, *v.* To bring young.

WHIMBREL (*Scolopax Pharopus*, LINN.; *Le Petit Courlis*, BUFF.) *s.*

The whimbrel is only about half the size of the curlew, which it very nearly resembles in shape, the colours of its plumage, and manner of living. It is about seventeen inches in length, and twenty-nine in breadth, and weighs about fourteen ounces. The bill is about three inches long, the upper mandible black, the under one pale red. The upper part of the head is black, divided in the middle of the crown by a white line from the brow to the hinder part; between the bill and the eyes there is a darkish oblong spot; the sides of the head, neck, and breast, are of a pale brown, marked with narrow dark streaks pointing downwards; the belly is of the same colour; but the dark streaks upon it are larger; about the vent it is quite white; the lower part of the back is also white. The rump and tail feathers are barred with black and white; the shafts of the quills are white, the outer webs totally black, but the inner ones marked with large white spots; the secondary quills are spotted in the same manner on both the inner and outer webs. The legs and feet are of the same shape and colour as those of the curlew.

The whimbrel is not so commonly seen on the sea shores of this country as the curlew; it is also more retired and wild, ascending to the highest mountain heaths in spring and summer to feed and rear its young.—*Bewick.*

WHIMPER, *v.* To cry without any loud noise.

WHINNY, *v.* To make a noise like a horse or colt.

WHIP, *s.* An instrument of correction tough and pliant.

WHIPCORD, *s.* Cord of which lashes are made.

WHIPHAND, *s.* Advantage over; right hand.

WHIPLASH, *s.* The lash or small end of a whip.

WHIPPER-IN, *s.* The field assistant to the huntsman.

You that know so well how necessary it is for a pack of fox-hounds to be steady, and to be kept together, ought not to wonder that I should prefer an excellent whipper-in to an excellent huntsman. No one knows better than you do how essential a good adjutant is to a regiment; believe me, a good whipper-in is not less so to a pack of fox-hounds. But I must beg you to observe that I only mean, that I could do better with mediocrity in the one than in the other.

You say you agree with me, that a huntsman should stick close to his hounds. If then his place is fixed, and that of the first whipper-in (where you have two) is not, I cannot but think genius may be at least as useful in one as in the other: for instance, while the huntsman is riding to his head hounds, the whipper-in, if he has genius, may show it in various ways; he may clap forward to any great earth, that may by chance be open; he may sink the wind to halloo, or mob the fox, when the scent fails; he may keep him off his foil; he may stop the tail hounds, and get them forward; and has it frequently in his power to assist the hounds without doing them any hurt, provided he has sense to distinguish where he is wanted most. Besides, the most essential part of fox-hunting, the making and keeping the pack steady, depends entirely upon him; as a huntsman should seldom rate, and never flog a hound. In short, I consider the first whipper-in as a second huntsman; and to be perfect, he should be as capable of hunting the hounds as the huntsman himself.

You cannot too much recommend to your whipper-in to get to the head of his hounds before he attempts to stop them. The rating behind is to little purpose, and if they are in cover, may prevent him from knowing who the culprits are. When your hounds are running a fox, he then should content himself with stopping such as are riotous, and getting them forward. They may be condemned upon the spot, but the punishment should be deferred till the next day, when they may be taken out on purpose to commit the fault and suffer the punishment. I agree with you that young hounds cannot be awed too much; yet suffer not your punishment of them to exceed their offence. I could wish to draw a line betwixt justice and barbarity.

A whipper-in, while breaking in young hounds, sometimes will rate them before they commit the fault: this prevents them for that time, but they will be just as ready to begin the next opportunity. Had he not better let them quite alone, till he sees what they would be at? The discipline then may be proportioned to the degree of the offence. Whether a riotous young hound runs little or much is of small consequence, if he be not encouraged; it is the blood only that signifies, which in every kind of riot should carefully be prevented.

My general orders to my whipper-in are, if

when he rates a hound, the hound does not mind him, to take him up immediately, and give him a severe flogging. Whippers-in are too apt to continue rating, even when they find that rating does not avail. There is but one way to stop such hounds, which is to get to the heads of them. I also tell him never on any account to strike a hound, unless the hound is at the same time sensible what it is for; never to strike a hound that does not deserve it, and to strike those hard that do.

Such of my hounds as are very riotous are taken out by themselves on the days when they do not hunt, and properly punished; and this is continued while my patience lasts, which of course depends on the value of the dog. It is a trial betwixt the whipper-in and the dog, which will tire first; and the whipper-in, I think, generally prevails. If this method will not make them steady, no other can: they are then looked upon as incorrigible, and are put away.

Such hounds as are notorious offenders should also feel the lash, and hear a rate, as they go to the cover; it may be a useful hint to them, and may prevent a severer flogging afterwards. A sensible whipper-in will wait his opportunity to single out his hound; he will then hit him hard, and rate him well; whilst a foolish one will often hit a dog he did not intend to hit; will ride full gallop into the midst of the hounds; will perhaps ride over some of the best of them, and put the whole pack into confusion. This is a manœuvre I cannot bear to see.

Have a care! are words which seldom do any harm; since hounds, when they are on a right scent, will not mind them. Let your whipper-in be careful how he encourages the hounds: that, improperly done, may spoil your pack.

A whipper-in will rate a hound, and then endeavour to flog him. A dog, after having been rated, will naturally avoid the whip. Tell your whipper-in, whenever a hound deserves the lash, to hit him first, and rate him afterwards.

When there are two whippers-in, one ought always to be forward. When there is only one, he, to be very perfect, should be a very Mungo, here, there, and everywhere.

You will find it difficult to keep your people in their proper places. I have been obliged to stop back myself to bring on hounds which my servant had left behind. I cannot give you a greater proof how necessary it is that a whipper-in should bring home all his hounds, than by telling you that I have lost an old hound for ten days, and sent all the country over to inquire after him; and at last, when I thought no more about him, in drawing a large cover in the country where he had been lost, he joined the pack: he was exceedingly emaciated, and it was a long time before he recovered. How he subsisted all that time I cannot imagine. When any of your hounds are missing, you should send the whipper-in back immediately to look for them: it will teach him to keep them more together.

The getting forward the tail hounds is a necessary part of fox-hunting, in which you will find a good whipper-in of the greatest use. He must also get forward himself at times, when the huntsman is not with the hounds; but the second whipper-in (who frequently is a young lad, ignorant of his business) on no account ought to encourage or rate a hound, but when he is quite certain it is right to do it; nor is he ever to get forward, as long as a single hound remains behind.

Halloo forward is certainly a necessary and a good halloo; but is it not used too indiscriminately?—it is for ever in the mouth of a whipper-in. If your hounds are never used to that halloo till after a fox is found, you will see them fly to it. At other times other halloos will answer the purpose of getting them on as well.

Most huntsmen, I believe, are jealous of the whipper-in: they frequently look on him as a successor, and therefore do not very readily admit him into the kennel; yet, in my opinion, it is necessary he should go there; for he ought to be well acquainted with the hounds, who should know him and follow him as well as the huntsman.—*Beckford.*

WHIRLBAT, *s.* Anything moved rapidly round to give a blow.

WHIRLPOOL, *s.* A place where the water moves circularly, and draws whatever comes within its circle towards its centre, a vortex.

WHIRRING, *a.* A word formed in imitation of the sound expressed by it, as the "whirring pheasant."

WHISPERER, *s.* One who speaks low; a private talker.

WHIST, *s.* A game at cards, requiring close attention and silence.

This game, which requires great care and attention, is played by four persons, who cut for partners; those who cut the two highest cards are partners against the two lowest, and

the person who cuts the lowest card is entitled to the deal. In cutting, the ace is acconnted the lowest.

Though it is customary for only the elder hand, and afterwards the dealer, to shuffle the cards, yet each player has a right so to do before the deal, but the elder hand ought to shuffle last, except the dealer.

The pack is afterwards cut by the right-hand adversary, and the dealer is to distribute the cards, alternately, one at a time, to each of the players, beginning with the left-hand adversary, till the last card, which must be turned up, being the trump, and left on the table till the first trick is played.

No one, before his partner plays, should intimate, that he has or has not won the trick; even the attempt to take up a trick, though won before the last partner has played, is deemed very improper. No intimations of any kind during the play of the cards between partners are to be admitted. The mistake of one party is the game of the adversary. However, there is one exception to this rule, in case of a revoke: if a person happen not to follow suit, or to trump a suit, the partner is permitted to inquire, whether he is sure he has none of that suit in his hand. This indulgence must have arisen from the severe penalties annexed to revoking, which affect the parties equally.

The person on the dealer's left-hand is called the elder hand, and plays first; and whoever wins the trick becomes the elder hand, and plays again; and so on till all the cards are played out. The tricks belonging to each party should be turned and collected by the respective partners of whoever wins the first trick in that hand. Each trick above six is reckoned one point towards the game. The ace, king, queen, and knave of trumps, are called honours; and when either of the parties has in his own hand, or between himself and his partner, three honours, they count two points towards the game; and if they should have the four honours, they count four points. Ten points make the game.

TWENTY-FOUR SHORT RULES FOR LEARNERS.

1. Always lead from your strong suit, and be cautious of changing suits.

2. Lead through an honour when you have a good hand.

3. Lead through the strong suit, and up to the weak, except in trumps, unless strong in them.

4. Lead a trump, if you have four or five, and a good hand besides.

5. Sequences are eligible leads, of which play the highest card.

6. Follow your partner's lead, not your adversary's.

7. Do not lead from ace queen, or ace knave.

8. Avoid leading an ace unless you have the king to it.

9. Never lead a thirteenth card, unless trumps are out.

10. Nor trump a thirteenth card, except last player.

11. Play your best card third hand.

12. When in doubt win the trick.

13. When you lead small trumps, begin with the highest.

14. Do not trump out, when your partner is likely to trump a suit.

15. If you hold only small trumps, make them when you can.

16. Make your tricks early, and be careful of finessing.

17. Be sure to make the odd trick when in your power.

18. Never force your adversary with your best card, unless you have the next best.

19. If you have only one card of any suit, and but two or three small trumps, lead the single card.

20. Always try to keep a commanding card to bring in your strong suit.

21. In your partner's lead, endeavour to keep the command in his hand.

22. Keep the card you turn up as long as you conveniently can.

23. Should your antagonists be 8, and you have no honour, play your best trump.

24. Always consider your score, and play your hand accordingly.

METHODS OF SCORING AT WHIST.

One.	Two.	Three.	Four.	Five.	Six.	Seven.	Eight.	Nine.
0	00	000	0000	0	0	00	000	0
				00	000	0	0	0
								0
0	0	0	00	0	0	0	0	00
	0	0	0	00	0	0	00	0
		0	0	0	00	00	0	0—*Hoyle.*

WHISTLE, *v.* To form a kind of musical sound by an inarticulate modulation of the breath; to make a sound with a small wind instrument; to sound shrill.

Whistle, *s.* Sound made by the modulation of the breath in the mouth; a sound made by a small wind instrument; a small wind instrument; the noise of birds; a call, such as sportsmen use to their dogs.

Whistler, *s.* One who whistles.

White, *s.* Whiteness, anything white; white colour; the mark at which an arrow is shot; the albuginous part of eggs; the white part of the eye.

White Trout, *s.* The sea trout.

The whole body is of an elegant form; the lateral line is straight; the colour between that and the top of the back, dusky and silvery intermixed; beneath the line, of an exquisite silvery whiteness; the first dorsal fin is spotted with black, and much forked; they seldom exceed a foot in length; when dressed, their flesh is red, and of most delicious flavour.

Their haunts are in rough stony streams, and at the sides and tails of them, where it is gravelly, and are sometimes to be met with in smooth gliding currents; they are to be taken with the black and green hackles (described among the standard flies) and afford great sport when hooked; they are so strong that some of them will spring with the line a yard out of the water, and that several times before they can be landed.—*Daniel.*

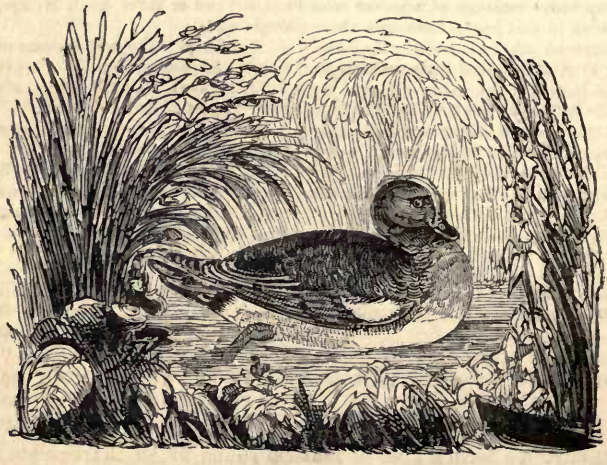
Whiting, *s.* A small sea fish; a soft chalk.

Whitlow, *s.* A swelling between the cuticle and cutis, called the mild whitlow: or between the periosteum and the bone, called the malignant whitlow.

Whoop, *s.* A shout of pursuit; a bird.

Whoop, *v.* To shout insultingly; to shout in the chace.

Wigeon, Whewn, Whirn, or Pandled Whew (*Anas Penelope*, Linn.; *Le Canard Siffleur*, Buff.) *s.* A waterfowl not unlike a wild duck, but not so large.



This is nearly of the same size as the gadwall, weighing generally about twenty-three ounces, and measuring nearly twenty inches in length, and two feet three in breadth.

The bill is an inch and a half long, narrow, and serrated on the inner edges; the upper mandible is of a dark lead-colour, tipped with black. The crown of the head, which is very high and narrow, is of a cream-colour, with a small spot of the same under each eye; the rest of the head, the neck, and the breast, are bright rufous chestnut, obscurely freckled on the head with black spots, and darkest on the chin and throat, which are tinged with a vinous colour; a band, composed of beautifully waved, or indented narrow ash-brown and white lines, separates the breast and neck; the back and scapulars are marked with similar feathers, as are also the sides of the body under the wings, even as low as the thighs, but there they are paler; the belly to the vent is white; the ridge of the wing, and adjoining coverts, are dusky ash-brown; the greater coverts brown, edged with white, (in some specimens wholly white,) and tipped with black, which forms an upper border to the changeable green beauty-spots of the wings, which is also bordered on the under side by another stripe formed by the deep velvet black tips of the secondary quills; the exterior webs of the adjoining quills are white, and those next the back, which are very long, are of a deep brown, (in some specimens a deep black) edged with yellowish white; the greater quills are brown; the vent and upper tail-coverts black.

Wigeons commonly fly in small flocks during the night, and may be known from others by their whistling note while they are on the wing. They are easily domesticated in places where there is plenty of water, and are much admired for their beauty, sprightly look, and busy frolicsome manners.

The tail, which consists of fourteen feathers, is of a hoary brownish ash, edged with yellowish white; the two middle ones are sharp-pointed, darker and longer than the rest. The legs and toes are of a dirty lead colour, faintly tinged with green; the middle of the webs and nails black. The female is brown, the middle of the feathers deepest; the fore part of the neck and breast paler; scapulars dark brown, with paler edges; wings and belly as in the male. The young of both sexes are grey, and continue in that plain garb till the month of February, after which a change takes place, and the plumage of the male begins to assume its rich colourings, in which it is said he continues till the end of July, and then again the feathers become dark and grey, so that he is hardly to be distinguished from the female.

These birds quit the desert morasses of the north on the approach of winter, and as they advance towards the end of their destined southern journey, they spread themselves along the shores and over the marshes and lakes in various parts of the continent, as well as those of the British isles, and it is said that some of the flocks advance as far south as Egypt. They remain in these parts during the winter, at the end of which the old birds pair, and the whole tribe in full plumage take their departure northward about the end of March. While they remain with us, they frequent the same places, and feed in the same mode as the mallard, and are often taken in the decoys along with them and other kinds of ducks.—*Bewick.*

WILD, *a.* Not tame, not domestic; propagated by nature, not cultivated; desert, uninhabited; tempestuous; inconstant, fickle; uncouth, strange; done or made without any consistent order or plan; merely imaginary.

WILD DOG, *s.* An untrained dog; a dog run wild.

In December, 1784, a dog was left by a smuggling vessel near Boomer, on the coast of Northumberland. Finding himself deserted, he began to worry sheep, and did so much damage that he was the terror of the country, within the circuit of above twenty miles. It is asserted that when he caught a sheep, he bit a hole in the right side, and after eating the fat about the kidneys, left it. Several of them thus lacerated were found alive by the shepherds, and being properly taken care of some of them recovered and afterwards had lambs. From this delicacy of his feeding, the destruction may in some measure be conceived, as the fat of one sheep in a day would scarcely satisfy his hunger. Various were the means used to destroy him; frequently was he pursued with hounds, greyhounds, &c., but when the dogs came up to him he laid down on his back, as if supplicating for mercy, and in that position they never hurt him; he therefore laid quietly, taking his rest till the hunters approached, when he made off without being followed by the hounds, till they were again excited to the pursuit, which always terminated unsuccessfully. He was one day pursued from Howick to upwards of thirty miles' distance, but returned thither and killed sheep the same evening. His constant residence was upon a rock on the Heugh Hill, near Howick, where he had a view of four roads that approached it, and there, in March 1785, after many fruitless attempts, he was at last shot. * * *

Another wild dog, which had committed devastation among the sheep, near Wooler, in the same county (Northumberland) was on the 6th of June, 1799, advertised to be hunted on the Wednesday following by three packs of hounds, which were to meet at different places; the aid of men and firearms was also requested, with a reward promised of twenty guineas to the person killing him. This dog was described by those who had seen him at a distance, as a large greyhound, with some white in his face, neck, and one foreleg white, rather grey on the back, and the rest a jet black; an immense concourse of people assembled at the time appointed, but the chase was unprosperous; for he eluded his pursuers among the Cheviot Hills, and what is singular returned that same night to the place from whence he had been hunted in the morning, and worried an ewe and her lamb. During the whole summer he continued to destroy sheep, but changed his quarters, for he infested the fells, sixteen miles south of Carlisle, where upwards of sixty sheep fell victims to his ferocity. In September, hounds and firearms were again employed against him, and after a run from Carrock Fell, which was computed to be thirty miles, he was shot whilst the hounds were in pursuit, by Mr. Lewel of Wedlock, who laid in ambush at Moss Dale. During the chace, which occupied six hours, he frequently turned upon the headmost hounds, and wounded several so badly as to disable them. Upon examination he appeared of Newfoundland breed, of a common size, wire-haired, and extremely lean. This description does not tally with the dogs so injurious to the farmers in Northumberland, although from circumstances there is little doubt but it was the same animal.—*Daniel.*

WILD, *s.* A desert, a tract uncultivated and uninhabited.

WILDFIRE, *s.* A composition of inflammable materials, easy to take fire, and hard to be extinguished.

WILD FOWL SHOOTING, *s.* To shoot water fowl.

During the time of long frosts, if going on the water or into the marshes, after the wild fowl, does not suit the shooter's convenience or choice, by attending the brooks and small rivers that are only partially frozen early of a morning, and following their course, he may frequently find diversion, and be almost certain of meeting with wild ducks searching both for food and fresh water; he will be also equally sure to get shots, for they will not rise until he is close upon them. In extreme severity of frost, with hard and permanent snow, the warm springs which do not freeze are spots that then seldom fail, as the wild ducks are confined to these places in order to procure the aquatic herbs growing there, and which are almost the sole food that remains for them at this inclement period.

In following wild fowl, it is easier to get within twenty yards of them by going to leeward, than a hundred and fifty if directly to windward; so very acute is their sense of smelling. * * *

The coast between Hampshire and the Isle of Wight is peculiar, consisting, at ebb tide, of vast muddy flats, covered with green seaweed: it affords the fowler an opportunity of practising arts perhaps not elsewhere resorted to. Fowling and fishing are indeed on this coast commonly the employment of the same person. He who in summer with his line or net, plies the shores, when they are overflowed by the tide; in winter, with his gun, as evening draws on, runs up in his boat among the little creeks, which the tide leaves in the mudlands, and lies in patient expectation of his prey. Sea-fowl usually feed by night, when, in all their multitudes, they come down to graze on the savannahs of the shore. As the sonorous cloud advances, the attentive fowler listens which way they bend their course:—perhaps he has the mortification to hear them alight at too great a distance for his gun to reach them; and if he cannot edge his boat round some winding creek, which it is not always in his power to do, he despairs of success that night: perhaps, however, he is more fortunate, and has the satisfaction to hear the airy noise approach nearer, till at length the host settles in some place upon the edge of which his boat is moored. He now, as silently as possible, primes both his pieces anew, (for he is generally doubly armed) and listens with all his attention: it is so dark that he can take no aim; for if he could discern the birds, they would also see him; and being exceedingly timorous, would seek some other pasture. Though they march with noise, they feed in silence; some indistinct noises, however, if the night be still, issue from so vast a concourse; he directs his piece, therefore, towards the sound, fires at a venture, and instantly catching up his other gun, discharges it where he supposes the flock to rise on the wing. His gains for the night are now decided, and he has only to gather his harvest. He immediately puts on his mud pattens (flat square pieces of board, which the fowler ties to his feet, that he may not sink in the ooze) ignorant yet of his success, and goes groping about in the dark in quest of his booty, picking up sometimes many, and

perhaps none. And, after all, others frequently enjoy more from his labours than himself: for the tide often throws, next day, on different parts of the shore, many of the birds which he killed, but could not find in the night.

This hazardous occupation once led a fowler into singular distress:—it happened too in the day-time, which shows still more forcibly the risk of such nocturnal expeditions. Mounted on his mud pattens, he was traversing one of these oozy plains in search of ducks, and, being intent only on his game, suddenly found the water, which had been accelerated by some peculiar circumstance affecting the tide, had made an alarming progress around him, and he found himself completely encircled: in this desperate situation, an idea struck him, as the only hope of safety. He retired to that part which seemed the highest, from its being yet uncovered by water, and striking the barrel of his long gun deep in the ooze, he resolved to hold fast by it, as well for a support as a security against the waves, and to wait the ebbing of the tide.—He had reason to believe that a common tide would not have flowed above his middle; but, in the midst of his reasoning upon the subject, the water had reached him:—it rippled over his feet—it gained his knees, his waist:—button after button was swallowed up, until at length it flowed over his shoulders! With a palpitating heart, he gave himself up for lost! Still, however, he held fast by his anchor:—his eye was eagerly in search for some boat, which might accidentally be passing, but none appeared. A head upon the surface of the water, and that sometimes covered by a wave, was no object to be descried from the land, at the distance of half a league; nor could he exert any sounds of distress that could be heard so far! While, as the exigence would allow, he was thus making up his mind to the terrors of certain destruction, his attention was called to a new object:—he thought he saw the uppermost button of his coat begin to appear! No mariner floating on a wreck could behold approaching succour with greater transport than he felt at the transient view of his button; but the fluctuation of the water was such, and the turn of the tide so slow, that it was yet some time before he durst venture to assure himself that the button was fairly above the level of the flood; at length, a second button appearing at intervals, his sensations may rather be conceived than described; and his joy gave him spirits and resolution to support his situation four or five hours longer, until the water had fully retired.—*Daniel—Gilpin.*

WILD TURKEYS, *s.* Turkeys not domesticated.

One of the keepers in Richmond Park informs me that he has often heard his father, who was also a keeper, mention that, in the reign of George the Second, a large flock of wild turkeys, consisting of not less than two thousand, was regularly kept up as part of the stock of the park. In the autumn and winter they fed on acorns, of which they must have had an abundant supply, since the park was then almost wooded with oak, with a thick cover of furze; and although at present eleven miles in circumference, it was formerly much larger, and connected with extensive possessions of the Crown, some of which are now alienated. Stacks of barley were also put in different places in the park for their support; and some of the old turkey cocks are said to have weighed from twenty-five to thirty pounds. They were hunted with dogs, and made to take refuge in a tree, where they were frequently shot by George the Second. I have not been able to learn how long they had been preserved in the park before his reign, but they were totally destroyed towards the latter end of it, in consequence of the dangers to which the keepers were exposed in protecting them from poachers, with whom they had many bloody fights, being frequently overpowered by them.

Though I have not been able, in any of the accounts which have been given of Richmond Park, to find a notice of the stock of turkeys; there can, I think, be no doubt of the fact, since the ancestors of the present head and second keepers of the park had, for many generations, been keepers in it, and have handed down to their present successors many curious accounts of the fights which took place between them and the poachers, in the preservation of the turkeys.

That turkeys would increase rapidly in the park if left to themselves, there can be no doubt, as a stray hen turkey brought up a large brood, which I saw, and which were quite wild. They kept in a part of the park little frequented, and if disturbed would take a flight and settle in trees: they were subsequently shot, and were in good condition. Had these birds been suffered to remain, they would probably have increased rapidly.

The only wild turkeys which I can at present hear of, are to be found in the park of Sir Watkin Williams Wynne, at Wynnstay, where there is a flock consisting of about five hundred. They were tried in Windsor Great Park, but did not succeed there. A few bustards are still to be found near Newmarket; but I believe they have quite deserted Salisbury Plain.—*Jesse.*

WILLOW, *s.* A tree.

WIND, *s.* A strong motion of the air; breath, power of respiration; flatulence; windiness; *down the wind,* to decoy.

Thick wind is a common consequence of either acute or chronic inflammations. In some instances, it is the immediate consequence of violent or long-continued exercise, particularly on a distended stomach and bowels, or after full drinking; or it may be brought on by the application of cold. It is often connected with a plethoric state, and is therefore very common among gross feeders, and where the exercise is not proportioned to the work; and more particularly in low-bred and thickset horses. The remote causes are usually increased vascular action; the proximate, the deposit occasioned by it, which blocks up the air-cells, and thus interferes with the freedom of respiration. The post-mortem examinations of such cases, exhibit, in some instances, a slight hepatisation of lung, the consequence of repeated congestions in plethoric habits; in others, the minute bronchial cells are filled with adhesive matter, or the general parenchymatous substance may be pervaded with minute granulations of a bluish colour.

The symptoms of thick wind are sufficiently known to any one at all conversant with horses, and the rationale by which they are produced is not difficult to explain. The capacity of the air cells being diminished, renders it necessary for the air to be more frequently taken in, because, being acted on by a less surface, the blood is not sufficiently oxygenated; and a sufficient number of air cells not being expanded, a sense of fulness in the right side of the heart induces the animal to make hasty inspirations to remedy the defect, and consequently hasty expirations: the force with which these are operated, occasions the sound so well known as the distinguishing mark of thick wind. In this affection, the obstruction to both being equal, the inspirations and expirations are equal, which serves to distinguish it from broken wind, in which there is no obstruction to the entrance; and therefore the breath is drawn in with its usual facility, but is expelled with difficulty. Thick wind is, however, very apt to degenerate into that state termed broken wind; and the post-mortem appearances of such horses as have been examined under thick wind would readily, by an increase of the disorganisation, account for the symptoms of broken wind; but it cannot be the hepatised lung that is changed into the emphysematous state.

The treatment of thick wind can seldom be more than palliative, as, once established, it remains permanent. In very recent cases, bleeding, blistering the chest, or mildly stimulating the course of the trachea and bronchia, by mercurial frictions, to promote the absorption of any deposit, may be tried. These having failed, a preventive treatment should be adopted, calculated to avoid any increase of the evil, as in the treatment of broken wind. I have, now and then, witnessed benefit from repeated doses of mild mercurial physic.

Broken Wind.—The remote causes of broken wind are hereditary or constitutional liability, as well as the remaining sufficiently long under the action of causes capable of exciting morbid changes in the respiratory organs themselves. A certain form of body is unquestionably favourable to its production, and it is from this circumstance that it proves hereditary. The narrow confined chest, and the pendent belly, which mark low bred horses and gross feeders, all of whom are observed to be peculiarly liable to it, are predisponents, by confining the ordinate action of the lungs, and affording no reserve for the inordinate. It must be this defect in form which makes it more common in mares than horses; subjecting horses to a long-continued unhealthy course of feeding on dry food, as chaff, bran, barley meal, &c., &c., brings it on; or working in mills, where much dust is necessarily inhaled. It is seldom the immediate consequence of pneumonia, but frequently it results from those states of disordered respiration which succeed to it, as thick wind, chronic cough, &c. The proximate causes we are as much in the dark about; we see that it gradually steals on a horse, occupying months, and even years, in a slight occasional cough, which ripening into a state of slightly impeded respiration on exertion, at last ends in broken wind. We see it also follow one hard gallop, and we can leave a horse well one day, and find him broken-winded the next.

The symptoms of this complaint are well marked; the cough and the mode in which respiration is performed may be considered as pathognomonic. The sound emitted by the cough is peculiar to this asthmatic state, and is often forced out with a kind of grunt through the upper part of the trachea, in a short but vibrating feeble tone compared with the usual cough of sound winded horses. The respiration is conducted with a remarkable difference between the inspirations and expirations. Inspiration is effected quickly and with the ordinary ease, because, as would be argued by those who favour the opinion that an emphysematous state of lungs is the sole cause of this equine asthma, the air is sup-

posed readily to find its way into the cellular tissue of the ruptured air-cells, where, becoming entangled, it occasions that remarkable difference in the ease with which inspiration is effected and the lengthened laborious effort of expiration, which, it may be observed, is performed by two distinct efforts, in one of which the usual muscles operate, and in the other the auxiliary muscles, particularly the abdominal, which are put on the stretch to complete the expulsion more perfectly; after which the flank falls with peculiar force, when these muscles resume their relaxations. An auxiliary symptom is the peculiar flatulence of every broken-winded horse, which is strikingly characteristic of that disordered state of digestion so common in these cases, and of that constant thirst also which is invariably present.

The treatment of broken wind can seldom be more than palliative. Whatever increases the distension of the vessels generally, as a state of plethora, or of the stomach and bowels particularly, aggravates the complaint by increasing the difficulty of expanding the lungs. Therefore, avoid stimulants, and promote regular evacuations by the bowels; abstain from over-distension of the lungs by too violent and too sudden exertions, particularly after eating; for the food, although it may be supposed to pass the stomach quickly, yet is retained longer in the large intestines, which equally press on the diaphragm. By carefully attending to these principal indications, a broken-winded horse may be rendered comfortable to himself, and useful to his owner. The food should be regularly given in moderate quantities only; but most particularly it should be of such a nature as will contain much nutriment in a small space: hence corn is more proper than hay, and, above all, I have found a manger food composed of one part bran, one part bruised beans, and two parts bruised oats, agree particularly well, given somewhat moistened, as indeed all the food given to a broken-winded horse should be. On a sufficient quantity of this food a horse will need but very little hay, and what he does have should be of the oldest and best kind, and principally given at night as a condiment to the corn. When they can be got, give also carrots, mangel wurzel, Swedish turnips, parsneps, or cooked potatoes, which feeding will be found to combine both medicine and nutriment, and render little water necessary. Turning out to grass commonly aggravates the symptoms of broken wind; but a daily run on a very short pasture is generally found advantageous, and a neglect of moderate exercise aggravates the complaint greatly; water should be sparingly given, particularly in the working hours: at night, a moderate quantity may and should be allowed, but on no account let the broken-winded horse drink his fill at a pond or trough. Medicinally, it may not be improper to bleed when the occasional symptoms run high; and benefit has been received from daily doses of foxglove under these circumstances. I have also administered antimony and nitre with advantage.

Modes of distinguishing soundness and unsoundness of the Wind.—These various affections of the wind are very important to the veterinarian, nor can he be too well informed of the appearances that characterise each distinctly; because, as their existence affects the legal soundness of horses, so he will be very often forced to decide peremptorily on very slight appearances. To detect thick wind it is generally necessary that some time be spent with the horse; and it is often requisite that he should be examined under various circumstances. Does he bear moderate exercise, immediately after eating or drinking, without blowing high? Does he cough in so doing, or is he observed to do it on every change of position, or temperature; particularly after drinking? And does he when in the stable, field, or when completely at rest, occasionally cough short, hollow, and not followed by that firm effort we call clearing afterwards? In such a case the horse has chronic cough; and as his breathing is more or less accelerated beyond the ordinary standard, he is more or less thick-winded also. Roaring may be immediately detected by a brisk gallop; but the person who is to judge of its existence should be on the ground, and the horse should pass him several times, but without restraint; for I have seen horses whipped into a momentary cessation of the roaring.

Broken wind can hardly be mistaken; the cough accompanying it conveys a peculiar sound; it is short, vibrates within, and is combined with a grunting effort, more particularly observable on any sudden motion or surprise; to produce which, dealers hold up the horse's head, and then either strike, or pretend to strike, him suddenly, or kick him, which usually elicits this peculiar grunting sound. The breathing is hurried in the extreme by exertion, and is remarkable by being made up of three efforts instead of two. In the first, the air is drawn in naturally, and the flanks fill up as usual; but in the next, the falling of the flanks, again to expel the air, is most unusual; for it is not done with a gradual contraction of the muscles, but takes place at once by a momentary effort; and then a third action takes place, which is a slow but strong drawing up of the muscles of the belly, as though to press out remaining air. Broken-winded horses are also observed to be peculiarly greedy after water; and a little hurried motion distends the nostrils, and produces evident distress.—*Blaine.*

WINDGALL, *s.* Windgalls are soft, yielding, flatulent tumours or bladders, full of corrupt jelly, which grow upon each side of the fetlock joints, and are so painful in hot weather and hard ways, that they make a horse to halt.

Windgalls consist of distended bursæ mucosæ, which have been described as small bags or sacs filled with synovia; and interposed between tendons and the parts upon which they move; but this is not the case. Windgalls seldom occasion lameness, and rarely disappear even after blistering and rest. Firing and long rest are the most likely means of strengthening the parts. In cases where no inconvenience is felt from them this severe operation is not advisable, but the legs may be kept bandaged.—*White.*

WINDGUN, *s.* A gun which discharges a bullet by means of wind compressed; the air gun.

WING, *s.* The limb of a bird by which it flies; a fan to winnow; flight, passage by the wing; the side bodies of an army; any side piece.

The bastard wings (*alula spuria*, LINN.) are three or five quill-like feathers, placed at a small joint rising at the middle part of the wing.

The lesser coverts of the wings, (*tetrices primæ*, LINN.) are small feathers that lie in several rows on the bones of the wings. The under coverts are those that line the inside of the wings.

The greater coverts, (*tetrices secundæ*, LINN.) are the feathers that lie immediately over the quill feathers and the secondaries.

The primores or primary quills, (*primores* LINN.) are the largest feathers of the wings; they rise from the first bone.

The secondaries, or secondary quills (*secondariæ*, LINN.) are those that rise from the second bone.

The tertials take their rise from the second bone, at the elbow joint, forming a continuation of the secondaries, and seem to do the same with the scapulars, which lie over them. These feathers are so long in some of the scolopax and tringa genera, that when the bird is flying they give it the appearance of having four wings.—*Montagu.*

WING, *v.* To furnish with wings; to enable to fly; to maim a bird by hitting the wing; to supply with side bodies.

WINGED, *a.* Furnished with wings; flying; swift, rapid; hurt in the wing.

WIPE, *v.* To cleanse by rubbing with something soft; to take away by tersion.

WIRE, *s.* Metal drawn into slender threads.

WISP, *s.* A small bundle, as of hay or straw.

WITHERS, *s.* Is the joining of the shoulder-bones at the bottom of the neck and mane.

Fistula of the Withers.—This disease comes by very severe bruises from the fore part of the saddle, which being neglected and repeated from time to time, produces at length an inflammation of the spinous processes of the dorsal vertebræ. A deep-seated abscess is the consequence, and the matter penetrates in different directions before it arrives at the surface, where at length it causes a tumour, which is very different from a common abscess, and requires always a considerable time to be cured. To give vent to the matter is the first object, and when that has been done, the extent of the injury must be ascertained. When this cannot be done, and this is sometimes the case, the caustic tents must be introduced, as I have described in the chapter on wounds and bruises; and when the slough or core which this causes, has separated, which will generally be in three or four days, the finger should be introduced as well as a probe, and the direction of the sinuses ascertained. A depending opening for the matter to run off freely must always be obtained, by cutting open the part freely. If a clean sore has been thus produced, or if it can be ascertained that there are no more sinuses or pipes, the cure may be effected by mild dressings,

or tents of digestive ointment, tincture of myrrh, &c.; but this is seldom the case, and repeated dressings with caustic tents are generally necessary. As soon as the bottom of the sore is arrived at, it will often be found that the tops of the spinous processes or the ligament covering them have been injured, and the bare bone may be distinctly felt with the probe. When this is the case the bare bone must be scraped with a suitable instrument, and then dressed with tincture of myrrh; after this the wound will readily heal by continuing to dress it with tincture of myrrh or digestive ointment, according to the directions given on wounds.—*White.*

WITHERWRUNG, *s.* An injury caused by the bite of a horse, or by a saddle being unfit, especially when the bows are too wide.

WOAD, *s.* A plant cultivated in England for the use of dyers, who use it for laying the foundation of many colours.

WOLFDOG, *s.* A dog of a very large breed, kept to guard sheep; a dog bred between a dog and a wolf.

WOODCOCK, (*Scolopax rusticola*, LINN.; *La Becasse*, BUFF.) *s.* A bird of passage with a long bill.

The woodcock measures fourteen inches in length, and twenty-six in breadth, and generally weighs about twelve ounces. The shape of the head is remarkable, being rather triangular than round, with the eyes placed near the top, and the ears very forward, nearly on a line with the corners of the mouth. The upper mandible, which measures about three inches, is furrowed nearly its whole length, and at the tip it projects beyond, and hangs over the under one, ending in a kind of knob, which, like those of others of the same genus, is susceptible of the finest feeling, and calculated by that means, aided, perhaps by acute smell, to find the small worms in the soft moist grounds from whence it extracts them with its sharp-pointed tongue. With the bill it also turns over and tosses the fallen leaves in search of the insects which shelter underneath. The crown of the head is of an ash colour, the nape and the back part of its neck black, marked with three bars of rusty red: a black line extends from the corners of the mouth to the eyes, the orbits of which are pale buff; the whole under parts are yellowish white, numerously barred with dark waved lines. The tail consists of twelve feathers, which, like the quills, are black, and indented across with reddish spots on the edges; the tip is ash-coloured above, and of a glossy white below. The legs are short, feathered to the knees, and, in some, are of a bluish cast, in others, of a sallow flesh colour. The upper parts of the plumage are so marbled, spotted, barred, streaked and variegated, that to describe them with accuracy would be difficult and tedious. The colours consisting of black, white, grey, ash, red, brown, rufous, and yellow, are so disposed in rows, crossed, and broken at intervals by lines and marks of different shapes, that the whole seems to the eye, at a little distance, blended together and confused, which makes the bird appear exactly like the withered stalks and leaves of ferns, sticks, moss and grasses, which form the back ground of the scenery by which it is sheltered in its moist and solitary retreats. The sportsman only being accustomed to it, is enabled to discover it, and his leading marks are his full dark eye, and glossy silver white-tipped tail. In plumage the female differs very little from the male, and, like most other birds, only by being less brilliant in her colours.

The flesh of the woodcock is held in very high estimation, and hence it is eagerly sought after by the sportsman. It is hardly necessary to notice, that in cooking it, the entrails are not drawn, but roasted within the bird, from whence they drop out with the gravy, upon slices of toasted bread, and are relished as a delicious kind of sauce.

The woodcock is migratory, and in different seasons is said to inhabit every climate: it leaves the countries bordering upon the Baltic, in the autumn and setting in of winter, on its route to this country. They do not come in large flocks, but keep dropping in upon our shores singly, or sometimes in pairs, from the beginning of October till December. They must have the instinctive precaution of landing only in the night, or in dark misty weather, for they are never seen to arrive, but are frequently discovered the next morning in any ditch which affords shelter, and particularly after the extraordinary fatigue occasioned by the adverse gales which they often have to encounter in their aërial voyage. They do not remain on the shores to take their rest longer than a day, but commonly find themselves sufficiently recruited in that time to proceed inland to the very same haunts which they left the preceding season. In temperate weather they retire to the mossy

moors and high bleak mountainous parts of the country; but as soon as the frost sets in, and the snow begins to fall, they return to lower and warmer situations, where they meet with boggy grounds and springs, and little oozing mossy rills which are rarely frozen, and seek the shelter of the close bushes of holly, furze, and brakes, in the woody glens, or hollow dells which are covered with underwood: there they remain concealed during the day, and remove to different haunts and feed only in the night. From the beginning of March to the end of that month, or sometimes to the middle of April, they keep drawing towards the coasts, and avail themselves of the first fair wind to return to their native woods: should it happen to continue long to blow adversely, they are thereby detained; and as their numbers increase, they are more easily found and destroyed by the merciless sportsman.

The female makes her nest on the ground, generally at the root or stump of a decayed tree; it is carelessly formed of a few dried fibres and leaves, upon which she lays four or five eggs, larger than those of a pigeon, of a rusty grey colour, blotched and marked with dusky spots. The young leave the nest as soon as they are freed from the shell, but the parent birds continue to attend and assist them until they can provide for themselves. Buffon says they sometimes take a weak one under their throat, and convey it more than a thousand paces.

Latham mentions three varieties of British woodcocks: in the first the head is of a pale red, body white, and the wings brown; the second is of a dun, or rather cream colour; and the third of a pure white. Dr. Heysham, in his catalogue of Cumberland animals, mentions his having met with one, the general colour of which was a fine pale ash, with frequent bars of a very delicate rufous; tail brown, tipped with white; and the bill and legs flesh colour. In addition to these, some other varieties are taken notice of by the late Marmaduke Tunstall, Esq. of Wycliff, in his interleaved books on ornithology.

Latham and Pennant assert that some woodcocks deviate from the course which nature seems to have taught their species, by remaining throughout the year and breeding in this country; and this assertion Mr. Tunstall corroborates by such a number of well authenticated instances, that the fact is unquestionable.

When the woodcock is pursued by the sportsman, its flight is very rapid but short, as it drops behind the first suitable sheltering coppice with great suddenness, and in order to elude discovery runs swiftly off, in quest of some place where it may hide itself in greater security. * * *

To describe the various methods which are practised by fowlers to catch this bird would be tedious; but it may not be improper to notice those most commonly in use, and against which it does not seem to be equally on its guard as against the gun. It is easily caught in the nets, traps, and springes, which are placed in its accustomed runs or paths, as its suspicions are all lulled into security by the silence of the night; and it will not fly or leap over any obstacles which are placed in its way, while it is in quest of its food; therefore in those places barriers and avenues formed of sticks, stones, &c., are constructed, so as to lure it into the fatal openings where it is entrapped; in like manner, a low fence made of the tops of broom stuck into the ground across the wet furrow of a field, or a runner from a spring which is not frozen, is sufficient to stay its progress, and to make it seek from side to side for an opening through which it may pass, and there it seldom escapes the noose that is set to secure it.

* * *

They leave the north with the first frost, and travel slowly south till they come to their accustomed winter quarters, they do not usually make a quick voyage, but fly from wood to wood, reposing and feeding on their journey, they prefer for their haunts woods near marshes or morasses; they hide themselves under thick bushes in the day, and fly abroad to feed in the dusk of the evening. A laurel or a holly bush is a favourite place for their repose, the thick and varnished leaves of these trees prevent the radiation of heat from the soil, and they are less affected by the refrigerating influence of a clear sky, so that they afford a warm seat for the woodcock. Woodcocks usually begin to fly north on the first approach of spring, and their flights are generally longer and their rests fewer at this season than in autumn. In the autumn they are driven from the north to the south by the want of food, and they stop wherever they can find it. In the spring there is the influence of another powerful instinct added to this, the sexual feeling. They migrate in pairs, and pass as speedily as possible to the place where they are likely to find food, and raise their young, and of which the old birds have already had the experience of former years. Scarcely any woodcocks winter in any part of Germany. In France there are few found, particularly in the southern provinces, and in Normandy and Britany. The woods of England, especially of the west and south, contain always a certain quantity of woodcocks; but there are far more in the moist soil and warmer climate of Ireland, but in the woods of southern Italy and Greece, near marshes, they are far more abundant, and they

extend in quantities over the Greek islands, Asia Minor, and northern Africa.

* * *

Woodcocks have been known to settle upon a vessel at sea. Mr. Travers, of Cornwall, records an instance, when at a distance from land unusual for birds to be seen, a bird was discovered hovering over the ship, when first discerned it was high in the air, but gradually descended, and after taking several circuits round, at length alighted on the deck; it was so wearied as to be taken up by the hand. Probably this bird had lost its companions, or, by the force of winds, was driven from the true aërial track. In 1799 a couple of woodcocks, seeking shelter from a gale of wind, alighted upon the Glory man of war, at that time cruising in the Channel.

* * *

In their flight the woodcock, like other birds, is attracted by a glare of light, and many instances have occurred, at the Cromer and Eddystone light-houses, of their falling victims to it; but in 1796, at the light-house upon the Hill of Howth, the man who attends whilst trimming his lamps was surprised by a violent stroke against the windows, which broke a pane of plate-glass cast for the place, more than three-eighths of an inch thick; on examining the balcony that surrounds the light he found a woodcock, which had flown with such violence as to break his bill, head, breast-bone, and both wings. The man had often found birds which had killed themselves by flying against the windows, but never before knew the glass to be injured.

* * *

Upon the Sussex coast woodcocks have been seen at their first dropping, in considerable numbers in the church-yard, and even in the streets of Rye, but during the night, the usual time of their flying, they removed further inland, and dispersed. At their first coming on that coast, they are commonly poor, as if wasted by their long journey; and are sometimes scurfy, though not so much as before their return in the spring; and it is remarkable, that when the woodcock first arrives, the taste of its flesh is quite different from what it is afterwards. It is very white, short, and tender, and seems to have little or no blood in it; but after it has been in this country a considerable time, the flesh becomes more tough, stringy, and fibrous, like that of domestic fowls. If a woodcock is shot just before his departure, it bleeds plentifully, whereas, at the beginning of winter, scarcely any blood flows from the wounds, by this it seems that in those countries, where they have their summer residence, they have a different nourishment to that they here find. Probably the luxuriant and succulent food which they meet with among us, prepares them for breeding in those countries where they retire with the companions of their choice. * * *

The woodcock feeds indiscriminately upon earth-worms, small beetles, and various kinds of larvæ, and its stomach sometimes contains seeds, which I suspect have been taken up in boring amongst the excrements of cattle; yet the stomach of this bird has something of the gizzard character, though not so much as that of the landrail, which I have found half filled with the seeds of grasses, and even containing corn, mixed with May-bugs, earth-worms, grasshoppers, and caterpillars.

* * *

The time of their appearance and disappearance in Sweden coincides exactly with that of their arrival in, and return from, Great Britain. Their autumnal and vernal appearances on the coast of Suffolk have been accurately noticed, they come over sparingly in the first week in October, the greater numbers not arriving until November and December, and always after sun-set. It is the wind and not the moon, that determines the time of their arrival, and it is probable that this should be the case, as they come hither in quest of food, which fails them in the places they leave; if the wind has favoured their flight, their stay on the coast where they drop is very short, if any, but if they had been forced to struggle with an adverse gale, such as a ship can hardly make any way with, they rest a day or two to recover their fatigue. So greatly has their strength been exhausted, that they have been taken by hand in Southwold streets; they do not come gregariously, but separate and dispersed. * * *

In the same manner as woodcocks quit us, they retire from France, Germany, and Italy, making the northern and cold situations their universal summer rendezvous. They visit Burgundy the latter end of October, but continue there only four or five weeks; it being a dry country, they are forced away, for want of sustenance, by the first frost. In the winter they are found in vast plenty as far south as Smyrna and Aleppo; during the same season, in Barbary, where the Africans call them the ass of the partridge. It has been asserted that some have appeared as far south as Egypt, which is the remotest migration to which they can be traced on that side the Eastern world; on the other side they are very common in Japan. The woodcocks that resort into the countries of the Levant, probably come from the deserts of Siberia or Tartary, or the old mountains of Armenia.

* * *

In the neighbourhood of Athens, hares and other game are purchased for little more than the value of powder and shot. In winter woodcocks abound, descending, after snow on

the mountains, into the plains; and suddenly retiring if the weather continues severe, they enter the gardens of the town in great distress, rather than cross the sea, and are sometimes caught with the hand.

* * *

It has been the belief that the woodcock has two broods in the year, because young ones have been found, just hatched, in the month of August; but I think the cause of the supposition is this,—that as woodcock shooting, at flight time, continues till late in the summer, some of the males may have been shot, and a new pair may have been formed later than usual. If in shooting you meet with a brood of woodcocks, and the young ones cannot fly, the old bird takes the young ones separately between her feet, and flies from the dogs with a moaning cry.

* * *

The woodcock, as it is well known, is a bird of passage. It usually took its departure from Sweden towards the end of October or beginning of November, and did not return until the approach of spring. Mr. Grieff says, he never knew the woodcock to make his appearance in the vicinity of Stockholm until the 6th of April, which about tallies with the time of their leaving our shores.

Woodcocks were exceedingly scarce in the vicinity of Stfirn, which was also the case in all other parts of Scandinavia that I ever visited. This may be supposed when I mention that I never killed more than three in any one day during my stay in the north of Europe. Indeed I never saw more than seven or eight of those birds in the course of a day's shooting, and very generally not one-fourth part so many. During the woodcock's periodical migrations, however, for during the winter not one of them remains in Scandinavia, they are occasionally, as it is said, to be met with in considerable numbers on the western coasts of Sweden and Norway.

As it is from the countries of which I am now speaking our covers are supposed to be supplied with woodcocks, it may seem extraordinary that those birds should there be so scarce as I have just described, and so plentiful in places with us. This, however, is easily explained, when we consider, that on their breeding grounds, extending over the whole of the north of Europe, there is probably a thousand times as much wood as in the United Kingdom; and, consequently, when they come to us, and are concentrated, if I may use the term, into our small covers, they naturally make a very great show.

It is generally said that woodcocks are less plentiful in Great Britain than formerly. This I have heard attributed to the Scandinavians eating the eggs of those birds. If, however, persons who entertain this opinion were to see the almost boundless northern forests, they would probably think with me, that if the whole of the scanty population of that part of the world were to go out for the purpose, they would not be able to explore the hundredth part of the woods in the course of a year, and consequently they could not take or destroy any considerable number of eggs.

* * *

In 1796, Mr. Yea, of Swansea, killed one hundred couple of woodcocks in one season. In Ireland, the Earl of Claremont shot half as many in a day, but then it should be premised, that such was the abundance of these birds, as to be sold in some parts (for instance, near Ballyshannon, in the County of Donegal) for one penny each, and the expense of powder and shot.

* * *

In the winter of 1797, the gamekeeper of E. M. Pleydell, Esq., of Whatcomb, Dorsetshire, brought him a woodcock which he had caught in a net set for rabbits, alive and unhurt. Mr. P. scratched the date upon a bit of thin brass, bent it round the woodcock's leg, and let it fly. In December next year, Mr. Pleydell shot this bird with the brass about its leg, in the very same wood where it had been first caught by the keeper.

* * *

Comical Direction.—Hawker says in a country where woodcocks are scarce, be sure to put a marker in a tree.

* * *

Woodcock Fancier.—Mr. Jeremiah Tupman, who died about thirteen years since at Berkeley, caught upon his estate at Lyston, a young male woodcock, which he carefully reared, and having procured a mate for it, they bred in considerable abundance. He was so pleased with his success, that he actually altered his will, which was originally made in favour of a young lady, and left his fortune to the minister at Berkeley, to be principally laid out in the breed of woodcocks, upon the neglect of which the estate was to revert to the family relations; a reversion for which probably the family were not long in expectancy.—*Bewick—Davy—Grieff—Daniel—Wild Sports—Lloyd, &c.*

WOODLAND, *s.* Woods, grounds covered with wood.

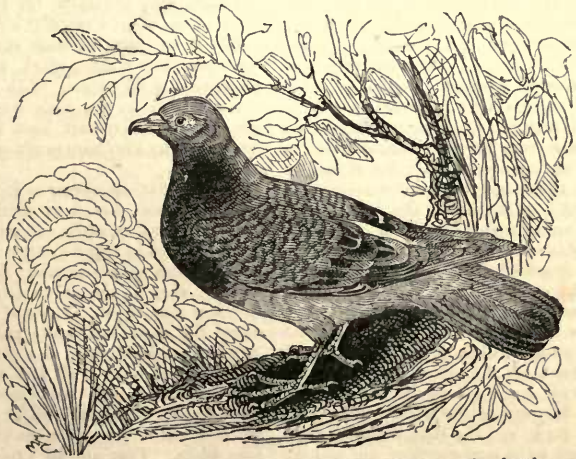
WOODLARK, *s.* A melodious sort of wild lark.

WOODMAN, *s.* A sportsman, a hunter.

WOODPECKER, *s.* A bird.

Of these only three or four kinds are found in Great Britain. Their characters are striking, and their manners singular. The bill is large, strong, and fitted for its employment: the end of it is formed like a wedge, with which it pierces the bark of trees, and bores into the wood in which its food is lodged. Its neck is short and thick, and furnished with powerful muscles, which enables it to strike with such force as to be heard at a considerable distance: its tongue is long and taper; at the end of it there is a hard horny substance, which penetrates into the crevices of trees, and extracts the insects and their eggs which are lodged there: the tail consists of ten stiff, sharp-pointed feathers, bent inwards, by which it supports itself on the trunks of trees while in search of food; for this purpose its feet are short and thick, and its toes, which are placed two forward and two backward, are armed with strong hooked claws, by which it clings firmly, and creeps up and down in all directions.—*Bewick.*

WOODPIGEON, *s.* A wild pigeon; one that builds in trees.



This species weighs about twenty ounces; length eighteen inches. The bill yellowish; irides light yellow; the head, coverts of the wings, and scapulars are of a deep bluish ash

colour; the neck and breast vinaceous, beautifully glossed with green and copper colour, changeable in different lights; on each side the neck is a large patch of glossy white, which almost joins behind; the back and tail ash colour, the latter black at the end; vent and thighs white, tinged with ash colour; the bastard wing almost black, behind which a few of the coverts are white, forming a line down to the greater quills, which are dusky, edged with white; the legs are feathered much below the knee, which, with the feet, are of a purplish red. There is little or no distinction in the plumage of the sexes; but the female is not quite so large.

WOODWARD, *s. obs.* A forester.

A subject who has lived within a forest, according to usage, ought to have a woodward; and if he does not appear at the justice seat, the wood shall be seized into the king's hands, till he makes fine and replevy it; and if he do not replevy it within a year, it shall remain in the king's hands for ever.

WOOL, *s.* The fleece of sheep, that which is woven into cloth; any short thick hair.

WOOLLY, *a.* Consisting of wool; clothed with wool; resembling wool.

WORM, *s.* A small harmless serpent that lives in the earth; a poisonous serpent; animal bred in the body; the animal that spins silk; grubs that gnaw wood and furniture; anything vermiculated or turned round; anything spiral; a favourite bait in angling.

When the day is dark or lowering, and a gentle whistling wind plays on the water, or a fine mizzling rain falls without violence; likewise when trout leap out of the water, and pike shoot after other fishes; and also when a sudden shower has mudded and raised the water, if the angler tries on the sides of the stream at the ground, with brandling, gilt tail, or red worm, well scoured, he will have diversion.

The ash grub or *bank-worm* is plump, milk white, and bent round from head to tail, with a red head, resembling a young humble bee, and is exceedingly tender; it is found under the bark of oak, ash, birch, or alder, especially if they lie a year after they are felled; it is also met with in the body of a rotten alder, when broken in pieces, but care must be observed in breaking the tree, that the worm is not crushed; it is sometimes found under the bark of an old decayed stump of a tree. It is best kept in bran, and will by that means be made tougher; but at the best they are so tender, that great caution must be observed in their use; the hook, which must be armed with a bristle to prevent its slipping down, should be introduced under its head, and guided down the middle of the belly, without suffering it to break the skin in its passage (for if it does, water and milk will issue from the wound, until nothing but the skin remains, when the bent of the hook will appear black through it), until the point of the hook comes so low that the head of the grub may rest on the bristle that projects to hold it; it will be thus defended from slipping off by its own exertions, nor will the force of the stream or quick pulling it out of the water, strip it off.

The brandling worm is streaked from head to tail in alternate red and yellow circles; is dark at the head; becomes gradually paler towards the tail. Brandlings are found in old dunghills which consist of hogs' and horses' dung and rotten earth; also in old thatch and dung; in grass mown from garden walks after it has lain some time: but those which are found in tanners' bark, after being used and laid by until quite rotten, are the best, and may generally be used without any scouring. When brandlings are kept in mosses like the lob-worm, they should be fed by dropping a little cream, about a spoonful a day, upon the moss; it will prevent their swelling at the knot near their middle, which, when it takes place, usually kills them. With some anglers it is a rule not to use these worms and the gilt tail until they have been in moss two days, nor after they have continued in it more than ten.

The short *white worms* or *bobs* are of two sorts: the one found in mellow, heathy, sandy soils, and is easily gathered by following the plough in autumn, when such ground is first broken up from grazing; also by digging one spot deep in the above described lands sufficient may be got. Those of this class are called the earth bob, white grub, or white bait, and are as big again as a gentle; have a pale red head, very soft all over, are yellowish at the tail, and their bodies when taken in some degree resemble the colour of the earth where found in, but when scoured are of a pale white. They are an excellent winter bait, and to preserve them they should be put

into a large earthen pot with some of its own earth, with dryish moss at the top, and set in a warm place.

Dunghill red worms are small and knotted, of a bright red, and are to be found almost in every heap of horsedung that has much straw rotted in it. Cowdung red worms are found in the fields, and in nearly dry flakes of dung; their heads are shining dark brown, with flat tails, are good baits, and may occasionally be used when taken, but are best scoured and preserved, like other worms.

The dock or flag-worm is of the colour of a gentle, when scoured, but is longer and slenderer in his make, with rows of feet down his belly, and a red head. They are found by pulling up the flags growing round an old pond or pit, shaking the roots in the water, and when free from dirt, amongst the fibres that spread from the roots, will be seen little husks of a reddish or yellowish colour; these must be opened very cautiously with a pin, and the worm either used immediately, or dropt into some bran to carry them, where they may be preserved in the same manner as the cad-bait; they sometimes insinuate themselves into the body of the round stalk of the flag.

The long dock-worms are of a fine pale red, without knots; are chiefly found in moist places, near dock-roots, and are best taken by shaking the earth with a dung-fork. They are excellent baits, especially for carp and tench. In the hollow parts near the roots of the largest sort of sedges, may be found a large black-headed grub, about an inch long, and which is not to be found in any other place; it is a famous bait for pond-fishing, though extremely tender; but by putting them into boiling milk for about two minutes, the morning you mean to use them, they will be rendered tougher.

Gilt-tails are paler and larger than the last-mentioned worms; are knotted like them, are of a pale yellow, especially towards the tail.

The marsh-worms are middle-sized and knotted; are of a bluish cast and tender; are to be found in the rich banks of rivers, and in marshy ground, wherein they are usually got by treading the ground when it is moist, much backwards and forwards, or in circles, with both feet close together; they require more scouring in moss than most other worms, at least fifteen days, but are very lively good baits.

White or marl worms are found chiefly in marl or clay land by following the plough, and also in turnip fields, where the soil is of a stiffish quality; the head is very small, and of a pale red; they are larger than the brandling, and naturally tough, are a good bait, especially in muddy water; may be preserved in some of their own earth, keeping it properly damp; with some moss at top, and when scoured are of a pale white.

The red worm is found in all loamy soils; may be collected by following a plough, turning up garden soil, and under boards, bricks, slates, tiles, stones, &c. that have lain undisturbed for any time: these four worms may be preserved together in one pot, and when the brandling or others are meant to be used, let the angler, the evening before, pick them out by themselves, and put them into a bag, with moss moistened with sweet thinnish cream, and they will appear more bright and tempting to the fish.

The tag-tail is a worm of a pale flesh-colour, with a yellow tag, almost half an inch long: it is found in marled land or meadows, after a shower, or in the morning, in calm and not cold weather in March and April. In discoloured water by rain, it is considered a fatal bait for trout. They will not endure long scouring.

A three-prong dung-fork thrust into the ground, and continually moving it, will force all the worms within a certain distance to come instantly out of their holes; supposing, from the shaking of the earth, it is the mole's heaving to come at them.

Get a parcel of cow or horse-hair, and cut it five or six inches long, into a pan; throw the worms upon it, and in a couple of hours they will have cleared themselves from the chief of their dirt; take them from amongst the hair, observing that none of it sticks to them, and selecting out the dead or wounded worms; clean the pan from the hair and filth, and put the worms into it, covering them with garden mould, about an inch thick: they will keep a very long time in this manner, moistening it once a day with new milk, and changing it every month, to prevent the growth of young worms, which would occasion the death and decay of the old.

Amongst the old recipes for scouring worms, the putting them into a powder got from a dead man's skull, by beating it to atoms, was deemed super-excellent.

When worms are wanted for immediate use, and no provision has been made, the way to scour them quickly, is, if lob-worms, to put them all night in water; brandlings must not remain above one hour in it, and both sorts must be then put with fennel into the angler's worm-bag.

* * *

Worms of different kinds inhabit the intestines; but except when they exist in very great numbers, they are not so hurtful as is generally supposed, although the groom or carter may trace to them hidebound, and cough, and loss of appetite, and gripes, and megrims, and a variety of other ailments.

Of the origin or mode of propagation of these parasitical animals we will say nothing; neither writers on medicine, nor even on natural history, have given us any satisfactory account of the matter.

The long white worm (*lumbricus teres*) much resembling the common earth-worm, and, being from six to ten inches long, inhabits the small intestines. It is a formidable looking animal, and if there are many of them, they may consume more than can be spared of the nutritive part of the food, or the mucus of the bowels; and we think that we have seen a tight skin, and rough coat, and tucked up belly, connected with their presence. They have then, however, been voided in large quantities, and when they are not thus voided, we should be disposed to trace these appearances to other causes. A dose of physic will sometimes bring away almost incredible quantities of them. Calomel is frequently given as a vermifuge. The seldomer this drug is administered to the horse the better. It is the principal ingredient in some quack medicines for the expulsion of worms in the human subject, and thence, perhaps, it came to be used for the horse; but in him we believe it to be inert as a vermifuge, or only useful as quickening the operation of the aloes. When the horse can be spared, a strong dose of physic is an excellent vermifuge, so far as the long round worm is concerned; but perhaps a better medicine, and not interfering with either the feeding or work of the horse, is two drachms of emetic tartar, with a scruple of ginger, made into a ball, with linseed meal and treacle, and given every morning half an hour before the horse is fed.

A smaller, darker coloured worm, called the needle worm, or *ascaris*, inhabits the large intestines. Hundreds of them sometimes descend into the rectum, and immense quantities have been found in the cœcum. These are a more serious nuisance than the former, for they cause a very troublesome irritation about the fundament, which sometimes sadly annoys the horse. Their existence can generally be discovered by a small portion of mucus, which hardening, is converted into a powder, and is found about the anus. Physic will sometimes bring away great numbers of these worms; but when there is much irritation about the tail, and much of this mucus, indicating that they have descended into the rectum, an injection of a quart of linseed oil, or of an ounce of aloes dissolved in warm water, will be a more effectual remedy.

The tape worm is seldom found in the horse.

* * *

Worms are most commonly found in the bowels and stomach; but they are sometimes met with also in almost every part of the body. The worms commonly found in the stomach are named botts. They are generally attached to the cuticular or insensible coat of the stomach; but sometimes clusters of them are found at the pylorus, and even in the beginning of the first intestine, named duodenum. In one case they were so numerous in this last situation as to obstruct the passage completely, and cause the animal's death. Botts are short thick reddish worms, surrounded with short prickles, which are arranged in circular bands all over the body. They attach themselves firmly by two hooks, which they appear to have the power of straightening and retracting, of projecting and curvating. They are extremely tenacious of life, and difficult to be expelled from the stomach, except about the month of September, or when a horse is taken up from grass. At this period they may generally be got rid of by brine, or a solution of common salt in water, in a dose of from four to five ounces of salt to a quart of water. The horse should be kept fasting the night before it is given; and about five minutes before the drench with salt is given, let the horse be drenched with about a pint of warm milk, sweetened with honey or treacle.

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Mercurial physic seems to be generally considered the most effectual, especially when a little calomel is given for two or three successive nights, and followed up by a dose of physic. I have seen small doses of aloes given daily, about two drachms, with good effect. Oil of turpentine is a powerful vermifuge, if given after some hours' fasting, and when the bowels have been brought into a lax state by giving bran mashes for two or three days, or a small dose (about three drachms) of aloes the day before.

This previous fasting, as well as keeping the horse without food two hours after, is necessary to the success of this remedy. In a few instances, oil of turpentine has produced alarming symptoms; and in one case, where a horse had taken a mild dose of physic the day before, it brought on almost immediately a fatal inflammation of the stomach and bowels. On the other hand, a great number of cases have been reported to me in which it has been given with the best effect. I should be inclined, however, to try the mercurial purgative first; but even this, in the horse, is attended with some danger, unless he is managed judiciously before, and during its operation. The third remedy is of a milder nature, but often, I believe, inert; that is, bitter vegetables, such as rue, box, savine, &c., which are chopped up and given with the horse's corn. Ethiop's mineral, levigated antimony, emetic tartar, very small doses of arsenic and calomel, have each of them some-

times succeeded. But, whatever worm medicine is given, the horse should be kept without food for several hours, or the whole night before, and two hours after. Chopped horse-hair has been given with success, and brine, or a solution of common salt. In one case, a great number of worms were discharged by fasting the horse during the night, and giving him a malt mash in the morning. Another method is to keep the horse without food during the night, and give him in the morning a quart of new milk sweetened with honey, and about ten minutes after, four, five, or six ounces of salt in a quart of water. A run at grass in the spring is, perhaps, the best remedy of all, for it is the most effectual means of invigorating the digestive organs, and purifying the blood. When it is not convenient to turn the horse out, he should be soiled in the stable with vetches. The most certain indication of worms, except that of their being discharged with the horse's dung, is a yellowish or brimstone-coloured stain under the fundament. Sometimes worms produce symptoms of an unusual kind, as in the following case:—A horse was observed for some time to fall off in flesh and become weak, and, upon attempting to mount him, he shrunk and gave way in the back, as if he had received some severe injury in that part; they gave him, however, a dose of mercurial physic, which brought off a lump of worms and viscid mucus as large as a man's fist. After this the horse was perfectly free from pain in the back, and quickly recovered his flesh and strength. I have heard of a horse being cured of worms, when reduced by them to such a degree of weakness that he was thought incurable, by being turned into a field of young vetches. Powdered tin has been recommended for worms, and may be given without danger in a dose of three or four drachms made into a ball with flour and honey. With regard to the short red worms, named botts, so often found in the horse's stomach, adhering in large clusters, most commonly to the insensible coat, but sometimes to the pylorus, the most likely means of expelling them is to give a drench of salt and water in the manner before prescribed; that is, to keep the horse without food during the night, and in the morning to give him a quart of new milk sweetened with honey; about ten minutes after this drench is down, the drench of salt and water is to be given. This remedy should be employed in September, or soon after a horse is taken from grass. Botts are so often found in the horse's stomach, that they have been supposed to do no harm; it is certain, however, that they sometimes produce the most serious diseases. They sometimes cause ulceration and sloughing of the stomach, inflammation of the lungs and heart, and frenzy or mad staggers. According to Gibson they sometimes cause locked-jaw. Botts appear to be the larvæ of a fly, and are probably eaten with grass or hay. According to Mr. Bracy Clark, the fly deposits its eggs on the horse's coat; and, when they are about to be hatched, the horse licks them off, so that they are hatched by the warmth of the mouth and the moisture of the saliva, and then swallowed. Mr. Feron says he has paid particular attention to this subject, and has found that, when in large quantities, they are very destructive to horses; that he has seen several horses whose stomachs had been pierced quite through by them, the botts making their way into the abdomen. He thinks they are taken in with the horse's forage, whether dry or green, as they are found in horses that have not been at grass for several years, but that they may also be licked in from the horse's coat. He is of opinion that botts, when once attached to the stomach, may remain there during the horse's life, and it is only when they become too numerous that they are forced off and discharged by the bowels. Mr. James Clarke relates a case of a horse's stomach being perforated by botts. I have seen several horses destroyed by botts. In some of them, they caused inflammation of the lungs; in one frenzy, or mad staggers. In one horse the pylorus was completely plugged up with them. There is a remarkable sympathy or consent between the stomach and the lungs, and it is owing to this that they sometimes cause inflammation of the lungs. In the cases which have occurred in my practice, the most remarkable circumstance was the great depression they occasioned, and the inefficacy of copious bleeding. Castor oil seemed to do more good than anything, and Mr. Feron remarks that common oil, given in large quantities, has sometimes succeeded in detaching botts from the stomach; and he adds, it is the only medicine that seems to have any effect in making them lose their hold from the stomach. There is a kind of worm I have often met with since I have practised in Somersetshire, especially at Oakhill, which appears to do a great deal of mischief. When drawn out, they are from one to three or four inches in length, from one to two eighths of an inch in breadth, and scarcely of any thickness; they have numerous transverse lines close to each other, like those of the leach, and adhere firmly to the bowels by one of their extremities. When viewed through a microscope, the transverse lines appear as upright scales applied very near to each other, and inclining, I think, a little forwards; the extremity, by which they adhere to the gut, appears as a bulb with holes in it; the other extremity is square, as if it had been cut off transversely. These worms

are generally of a white colour, and sometimes drawn up or contracted so as to appear as a flake of mucus, or fat, of about half an inch in length. I have seen them of a darker colour in horses that were in a state of great poverty, and sometimes reddish, as if containing blood. In many dogs and cats that have been opened at Oakhill, they have been almost invariably found; and they have been discharged, in this village, from the bowels of men and children. They are found both in the small and large bowels, most commonly in the former, and near the part where the ilium terminates in the cœcum. At Easton, near Wells, this worm has been seen swimming in a small stream that runs through the village, from which it is probable that their natural habitation is water, and that they are swallowed while the animal is drinking, and are capable of living in the bowels.

* * *

Method of worming dogs.—Secure a large dog on his back on a table, bench, or form; one of a middling size may be held in the lap of an assistant; a small one may be conveniently taken into that of the operator. The mouth being held open by means of two pieces of tape—one embracing the part immediately behind the *upper*, and the other that *posterior* to the lower canine teeth—draw the tongue from the mouth, when, exposing its under surface, a cuticular fold or eminence will present itself, occupying its median line from the point to the base: open this with a lancet through its whole extent, which will expose a minute fibrous cord. Pass a blunt-pointed probe under it, and, carrying the instrument from one end to the other, detach the cord from its adhesions; which done, divide it at one extremity, and carefully drawing it forwards with a tenaculum, divide the other also. The uninitiated in sporting mysteries may smile at all this minuteness of detail, and recommendation of caution, in the *division* of a *line* of *skin*, and the *extraction* of a *thread* of ligament; but all this is actually necessary to satisfy the prejudices of those who put faith in the operation. For with them it is essential to the prospective benefits of it, not only that the whole of the *worm* (for which read frænum) should be extracted, but that, if possible, it should be done in one continuous mass.

In the removal of this cord by huntsmen, game-keepers, &c., the violence used in stripping it off, puts its fibrous substance so much on the stretch, that when extracted, its elasticity making it recoil, gives it somewhat the character of the contraction of a dying *worm;* and we may yet read of this appearance, and its general form, being adduced as proofs of its vermicular identity. And although now no informed person gives credence to its being other than a portion of the canine tongue; yet there are many sporting characters of education and ability, who still lend themselves to an opinion that there is some enigmatical property inherent in this part, which renders its retention dangerous, by making the unwormed dog the subject of acute rabies, but the wormed one the subject of the dumb variety. Of a piece with this palpable error was that of Marochetti's vesicles in the same vicinage; which being also with him the hiding-place of the rabid virus, it became as necessary, according to his doctrine, to destroy them as it was with the ancients (and yet remains with some of the moderns) to remove the *worm.*

* * *

Of these worms which appear indigenous to the intestines of the dog, the *tænia*, or tape worm, from its flat figure, is the most prejudicial, and the most difficult to remove. I have known four or five hundred joints (each a distinct animal) passed by a dog, whose united length would encircle his body many times. Sometimes they become coiled up into a ball, which thus forms an impenetrable obstruction within the intestines, and destroys the dog.

The *teres*, or long cylindrical worms, resembling earthworms in figure, but of a whitish colour, are the most common to dogs; and, when existing in great numbers, particularly in puppies and young ones, sometimes prove fatal by the convulsions they occasion. In distemper they greatly aggravate the symptoms; so much so, that to destroy them frequently cures the dog. The natural situation of these worms is within the intestines, but they sometimes crawl from them into the stomach, and are then brought up by the sickness they occasion.

The *ascarides*, or small thread-worms, likewise occasionally infest dogs, residing principally within the rectum. They produce an intolerable itching behind, to relieve which those troubled with them are seen continually drawing the fundament along the ground. Except by the irritation occasioned, which may weaken when it is excessive, they do not appear to do much internal injury. The constitution of some dogs appears particularly favourable to the generation of worms; for, destroy them as often as you will, they soon return again. Puppies, during every stage of their growth, are very liable to them; in many, the increase of the body appears checked by their ravages.

The *presence of worms*, when they exist in considerable numbers, is easily detected; for such a dog has usually a slight cough, his coat stares, he eats voraciously, yet seldom fattens: his evacuations prove also a most unequivocal symptom, for they are, in such cases, peculiarly irregular, being at one time

loose and slimy, and at another more hard and dry than natural. The belly likewise is often tense and enlarged. When very young dogs have worms, the first that pass are seldom noticed, for they seem to affect the health but little; but gradually, as they increase, purging becomes more frequent; and the animal, though lively, becomes emaciated; his appetite is often irregular, his nose hot and dry, and his breath fœtid. The growth likewise appears stationary, and in this way it is very common for him to continue till a fit or two carries him off, or he dies tabid. In adult dogs worms are less fatal, though, from the obstructions they form, they sometimes kill them likewise; and they always occasion a rough unhealthy coat, with a hot nose and fœtid breath; and in both the young and the full grown, they occasionally produce epileptic fits. It does not follow, because no worms are seen to pass away, that one who exhibits the other symptoms of them has none; neither, when they are not seen, does it follow even that none pass; for, if they remain long in the intestines after they are dead, they become digested like other animal matter.

The *treatment* of worm cases in dogs has been like that of the human, and the remedies employed have been intended either to destroy the worms within the body, or otherwise to drive them mechanically, as it were, out of the bowels by active purgatives; but, as these latter means were violent (for, without the very mucus of the bowels, as well as the fæces, were expelled, no benefit was derived from them), so the remedy, in many instances, became worse than the disease. Many substances have, therefore, been tried in hopes of destroying these animals within the body; and it is evident that any thing that could certainly do this would be most important, as it would obviate the necessity of having recourse to the violent purgative means heretofore employed.

For this purpose, substances which present small spiculi, or points, have been found the best adapted for the destruction of worms, by abrading their external or internal surfaces, and that without in the slightest degree injuring the patient. Among huntsmen and gamekeepers glass, very finely powdered, is a very favourite remedy. An old man of this description, in Buckinghamshire, was famed for worm-killing in dogs, and his only means used was glass finely powdered, and given as a ball. Mr. Youatt also recommends the same. If this should be objected to, from what I believe to be a groundless fear, that it is dangerous, try the following:—

Cowhage (*dolichos pruriens*, Linn) . . half a drachm.
Tin filings or iron, made with a very fine file . 4 drachms.

Form into four, six, or eight balls, and give one every morning; after which, a mercurial purgative will be proper. I have occasionally succeeded, in very obstinate worm cases, by moderate daily doses of Epsom salts. Ascarides are best destroyed by soap or aloetic clysters. The tape-worm is not unfrequently removed by mercurial purges; but a still more certain remedy for this noxious guest is such doses of the oil of turpentine as a dog could safely take, remembering that dogs bear very little of it: to some, however, it proves much less hurtful than to others. A small dog might be tried with half a drachm, given night and morning, mixed with the yolk of an egg, for a few days: a larger two scruples, and the largest a drachm, beginning always with a very small dose, and increasing it, if it produce no disturbance.—*Daniel—The Horse—White—Blaine.*

Wormeaten, *a.* Gnawed by worms, worthless.

Wormwood, *s.* A plant.

Wormy, *a.* Full of worms.

Wound, *s.* A hurt given by violence.

Wounds, bruises, and other injuries, may happen in various ways, by kicks, by bites, in leaping over hedges or gates, by kicking against stalls, and many other ways. Various names have been applied to such injuries, according to the manner in which they are inflicted; but there is no occasion for such distinctions: they are all bruises or contused wounds, and all require to be poulticed or fomented. It is to be observed, that, in all injuries of this kind, whether wounds or bruises, or both, the horse should be immediately bled freely, and have his bowels opened by a dose of physic. The diet also should be attended to, allowing only a very moderate quantity at first of grass, or bran mashes. In all those cases poultices are by far the best remedy, until the inflammation is completely subdued; and when the situation of the part will not admit of a poultice, which is seldom the case, then fomentations of warm water only, almost constantly applied, are the best substitute. When inflammation has quite ceased, which may be known by an abatement of the pain and swelling, and by the appearance of white matter, the poultice may be discontinued, and then the wound should be carefully dressed to the bottom with a tent of tow, dipped in melted digestive ointment. The cavity is not to be filled with the tent, but it must be introduced to the bottom, and then the wound will heal as it ought; whereas, if it is dressed superficially, or only

syringed, it will often close over at the surface, and the wound appear healed, while the matter is spreading and doing mischief at the bottom. There are four obstacles to the complete healing of wounds which sometimes occur, and these are, when the wound has been complicated with an injury of a bone, a ligament, a cartilage, or a tendon. In either of these cases the fleshy parts and skin will generally heal readily, and the wound will appear nearly or quite healed, except a small or minute orifice, from which a little matter oozes; and this orifice is not perceptible, being covered with spongy flesh, until a probe is introduced; it will then be found that there is a sinus running down to the bottom of the original wound, and there the probe will be resisted by the diseased bone, ligament, cartilage, or tendon. The bone may be easily distinguished by the sensation conveyed to the hand through the probe; and when this is felt a free opening should be made, if the situation of the wound will admit of it, and the diseased surface scraped off. A tent of friar's balsam should then be introduced, and continued until it is cured. If the first scraping has not been freely performed, a second may be necessary. Sometimes sinuses, or pipes, as they are termed, remain after the inflammation of wounds has subsided. If these are superficial, running under the surface, or nearly horizontally, they require to be laid open, and then they heal readily. Sometimes they run obliquely inward, or perpendicularly, and then require to be dressed at first with stimulating or even caustic tents, of solution of blue vitriol; and these must be repeated until the sides of the sinus have sloughed off, and the very bottom of the wound can be distinctly felt. In all complicated ulcers of this kind, where the sinus runs in a winding or crooked direction, or where there are two or more sinuses, the caustic tents must be repeated until they are brought to the state of one simple sore, the bottom of which can be distinctly felt; and if the bottom happen to be bone, it must be scraped freely and dressed with friar's balsam. A good method of destroying such sinuses is to take some corrosive sublimate, or finely pulverised blue vitriol, and fold it up in a long narrow slip of thin whity-brown paper; this being neatly folded may be twisted at each end, and may thus be conveniently introduced into the sinuses, and forced to the very bottom with a long probe. Several small particles of this kind may be made and forced in one after another, until all the sinuses are completely filled. By these means a large core or slough will be brought out in four or five days; and if the sinuses are not then so destroyed that the bottom can be ascertained, the same dressing must be repeated.

There is a class of punctured wounds that will not admit of the treatment I have described; these are punctured wounds of the sheath of tendons, and the capsular ligament of joints. Such wounds often happen about the fetlock and hock joint, or in the sheath of the flexor tendon, or back sinew; and these are often attended with considerable inflammation and swelling. It will not be proper to introduce tents into such wounds, or to irritate them by probing: emollient poultices are considered the remedies for such wounds; but they do not always succeed; I have in several cases found it necessary to touch the wound with lunar caustic, before I could procure any abatement of the inflammation and swelling, and I am inclined to believe that this had better be done on the first occurrence of such wounds. The caustic should be scraped off to a point, and introduced within the wound about the eighth of an inch or a little more; it should then be moved round a little, and withdrawn. I have seen a punctured wound in the fore leg, near the fetlock joint, get well rapidly after this had been done; though emollient poultices and fomentations had been carefully employed for several days before without doing the least good; on the contrary they were doing harm, for the inflammation, pain, and swelling, certainly increased while they were employed. But the caustic seemed to operate almost as a charm; for the leg got well in two or three days after it was applied. I have seen a similar good effect from it in a punctured wound of the hock joint.

In lacerated wounds, as they are termed, the skin is often much torn, and so are the muscles or flesh. Now the muscles must never be stitched up, on any account whatever; the skin only is to be stitched or sewed up, and that will rarely be of any use in the horse, as union by the first intension, I believe I may venture to say, can never be accomplished in the horse, except in one situation, and that is in the forehead, when the skin has been torn neatly down or up and not bruised. When the skin of a lacerated wound has been stitched up, the stitches always give way, and the wound is completely open again by the fifth day, and then the flap of skin may as well be removed, for it never will unite. The scar will then be much less than a person would imagine, for the skin and hair will be in a great measure regenerated, and scarcely any blemish will be left.

Bruises always require to be poulticed, and there is scarcely any situation where this cannot be done, if a person will but take a little trouble about it. If, however, it cannot be done, a fomentation is the best substitute. For bruises on the back the old farriers employed a greasy dish-clout, and this, next to a

poultice, is perhaps the best remedy; for the cloth has been so softened by almost constant maceration in water, and is so completely imbued with grease, that it really becomes a good emollient application, and only requires to be kept wet. By this treatment bruises will be generally brought to suppuration, and if they are capable of being dispersed, poultices are the best means of effecting it. When a bruise has been brought to suppuration, or has thrown off a slough, it may then be considered as a wound or rather ulcer, for such wounds do become when they have suppurated, and must be treated according to the directions I have given under that head. These are all the instructions necessary to be given for the treatment of wounds and bruises. I think there is no occasion here for the classification and distinctions that are employed in human surgery; and it will be found, I trust, that what has been said on the subject, will be sufficient for every accident that may happen.

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When a horse becomes suddenly lame, after the legs have been carefully examined and no cause of lameness appears in them, the shoe should be taken off. In many cases the offending substance will be immediately detected, or the additional heat felt in some part of the foot will point out the seat of injury; or, if the crust be rapped with the hammer all round, the flinching of the horse will discover it; or pressure with the pincers will render it evident.

When the shoe is removed for this examination the smith should never be permitted to wrench it off, but each nail should be drawn separately, and examined as it is drawn, when some moisture appearing upon it will not unfrequently reveal the spot at which matter has been thrown out. In the fore-foot the injury will generally be found on the inner quarter, and on the hind foot near the toe, these being the thinnest parts of the fore and hind-feet.

Sudden lameness occurring within two or three days after the horse has been shod will lead us to suspect that the smith has been in fault; yet no one who considers the thinness of the crust, and the difficulty of shoeing many feet, will blame him for sometimes pricking the horse. His fault will consist in concealing or denying that of which he will almost always be aware at the time of shoeing, from the flinching of the horse, or the dead sound, or the peculiar resistance that may be noticed in the driving of the nail.

When the seat of mischief is ascertained, the sole should be thinned round it, and, especially at the nail-hole or the puncture, it should be pared to the quick. The escape of some matter will now probably tell the nature of the injury, and remove its consequences. If it be puncture of the sole by some nail, or any similar body, picked up on the road, all that will be necessary is a little to enlarge the opening, and then to place on it a pledget of tow dipped in friar's balsam, and over that a little common stopping; or, if there be much heat and lameness, a poultice should be applied.

The part of the sole wounded and the depth of the wound will be taken into consideration. It will be seen that a deep puncture towards the back part of the sole, and penetrating even into the sensible frog, may not be productive of serious consequence. There is no great motion in the part, and there are no tendons or bones in danger. A puncture near the toe may not be followed by much injury. There is little motion in that part of the foot, and the internal sole covering the coffin-bone will soon heal; but a puncture about the centre of the sole may wound the flexor tendon where it is inserted into the coffin-bone, or may even penetrate the joint which unites the navicular bone with the coffin-bone, or pierce through the tendon into the joint which it forms with the navicular-bone, and a degree of inflammation may ensue, which, if neglected, may be fatal. Many horses have been lost by the smallest puncture of the sole in these dangerous points. All the anatomical skill of the veterinarian should be called into requisition, when he is examining the most trifling wound of the foot.

If the foot has been wounded by the wrong direction of a nail in shoeing, and the sole be well pared out over the part on the first appearance of lameness, little more will be necessary to be done. The opening must be somewhat enlarged, the friar's balsam applied, and the shoe tacked on, with or without a poultice, according to the degree of lameness or heat, and on the following day all will often be well. It may, however, be prudent to keep the foot stopped for a few days. If the accident has been neglected, and matter begins to be formed, and to be pent up and to press on the neighbouring parts, and the horse evidently suffers extreme pain, and is sometimes scarcely able to put his foot to the ground, and much matter is poured out when the opening is enlarged, further precautions must be adopted. The fact must be recollected that the living and dead horn will never unite, and every portion of the horny sole that has separated from the fleshy sole above must be removed. The separation must be followed as far as it reaches. Much of the success of the treatment depends on this. No small strip or edge of separated horn must be suffered to press upon any part of the wound. The exposed fleshy sole must then be touched,

but not too severely, with the butyr (chloride) of antimony, some soft and dry tow placed over the part, and the foot stopped, and a poultice placed over all, if the inflammation seems to require it. On the following day a thin pellicle of horn will frequently be found over a part or the whole of the wound. This should be, yet very lightly, touched again with the caustic; but if there be an appearance of fungus sprouting from the exposed surface, the application of the butyr must be more severe, and the tow again placed over it, so as to afford considerable yet uniform pressure. Many days do not often elapse before the new horn covers the whole of the wound. In these extensive openings the friar's balsam will not often be successful, but the cure must be effected by the judicious and never too severe use of the caustic. Bleeding at the toe and physic will be resorted to as useful auxiliaries when much inflammation arises.

In searching the foot to ascertain the existence of prick, there is often something very censurable in the carelessness with which the horn is cut away between the bottom of the crust and the sole, so as to leave little or no hold for the nails, while some months must elapse before the horn will grow down sufficiently far for the shoe to be securely fastened.

When a free opening has been made below, and matter has not broken out at the coronet, it will rarely be necessary to remove any portion of the horn at the quarters, although we may be able to ascertain by the use of the probe that the separation of the crust extends for a considerable space above the sole.

* * *

Dogs are liable to become wounded in various ways, and their wounds, however bad, are not, generally much attended to, from an opinion that the animal's tongue is the best dressing. This is very questionable: in some instances, I am certain, no application can be worse to a wounded dog than his own tongue. Whenever dogs are at all inclined to foulness, as a tendency to cuticular complaints is called, a sore, so licked, is sure to become mangy, and to be aggravated by the licking.

Wounds in the chest or belly should be closed up as soon as possible, to prevent the external air from penetrating: a stitch or two made in the integuments is proper; over which some adhesive plaster, and a bandage over that, may be applied. If the intestines protrude in a wounded belly, and the bowels are themselves wounded; first, neatly stitch up the intestinal opening, and return the gut; then close the wound in the integuments, leaving the thread which united the gut, if long enough, hanging without the external wound.

In wounds of arteries or veins, the hæmorrhage should be stopped by pressure: should that not succeed, take up the vessel with needle and thread. Wounds into joints occur from cuts, and often from stabs: great inflammation is apt to follow, and the dog is often lamed for life. If the synovia escapes by a very minute puncture, and the inflammation is not yet very extensive, treat exactly as in horse practice, by firing with the budding iron. If the wound be a lacerated one, and not already much inflamed, place over it a pledget of lint, and over that a thick paste of linseed meal; after which bandage the whole up moderately tight. Should the inflammation be great, reduce that by a common poultice, and then endeavour to close the joint as above.

In all extensive and lacerated wounds, a stitch or two should be made with a large needle and thread, as it will reduce both the sore and the scar; but as such stitches soon ulcerate out in the dog, so the edges should be still further secured by slips of sticking-plaster. A recent wound should be cleansed from the dirt, and then covered up; when it begins to suppurate, dress with any mild ointment. In thorn wounds, or others made with splinters, carefully examine that nothing is left within them; otherwise no attempts to produce healing will prove successful. The most common wounds in dogs arise from the bites of others; and, under any such circumstance, should any suspicion arise that the dog was mad by which the wounded one was bitten, proceed as directed under Rabies. The wounds arising from common bites, in general soon heal of themselves. If, however, they are very extensive, wash them with friar's balsam, to prevent their becoming gangrenous.

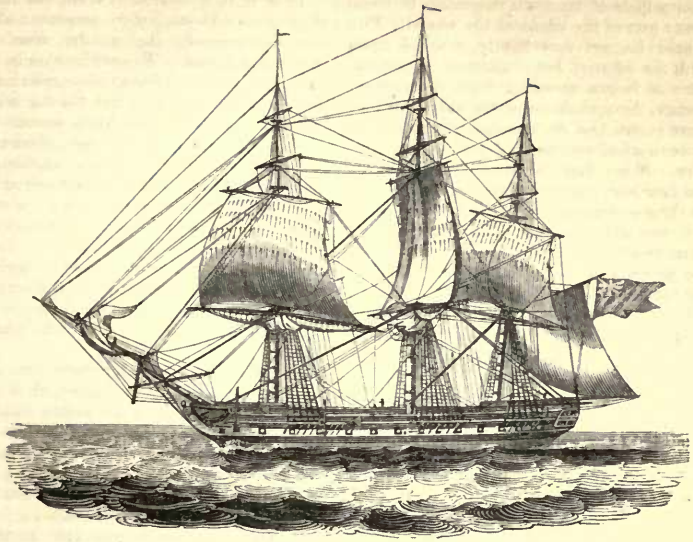
* * *

For a wound from shot.—Oil of turpentine, oil of camomile, and aqua vitæ, of each two ounces, and half a pint of linseed oil, well mixed together. A second is goose grease, melted and strained through a sieve, and an equal quantity of best spirits of wine and spirits of turpentine: of the three articles put rather most of the goose grease, which must be fresh, and strained quite clear and fine.—*White—The Horse—Blaine—Daniel.*

WREN, *s.* A small bird.

WRENCH, *s.* A violent pull or twist; a sprain.

WRESTLE, *v.* To contend who shall throw the other down; to struggle; to contend.



LORD YARBOROUGH'S YACHT.

YACHT, *s.* A small ship anciently used for carrying passengers; a private vessel of pleasure.

The Royal Yacht Club, at the present time, has about five hundred and eighty-eight persons on its lists, of which one hundred and thirty-six are members, and four hundred and fifty-two are honorary members. Of the former number about one fifth are peers, twelve baronets, four knights, three generals, three colonels, eight captains, two clergymen, and seventy-nine private gentlemen. Among the latter (honorary members) we find nineteen admirals, twenty-nine vice-admirals, thirty-one rear-admirals, and three hundred and sixty-two captains, independently of eleven eminent civilians, who head the list. The number of yachts is one hundred and nine—of which eighty-seven are cutters, ten schooners, three brigs, four yawls, two ships, two ketches, and one lugger. The greater part of these vessels belong to Cowes and to Southampton, the rest being distributed among the different ports of the three kingdoms. The shipping belonging to the club amounts to 7250 tons. Now, at a moderate computation, each vessel carries ten men on an average; this gives us the total number employed by the club, one thousand and sixty. During the summer months, then, while regattas are celebrated, we may say that the Royal Yacht Club alone supports more than eleven hundred men. These, with some few exceptions, are discharged on the approach of winter, and the yachts are laid up for the season, retaining the master and one man in pay. The crews thus discharged obtain employment in merchant vessels or otherwise during the winter, and in the middle of spring are generally re-shipped in the yachts in which they have previously served. Active and industrious men of good character are always sure of constant employment in the club on these conditions; and many members justly pride themselves on the high discipline, manly bearing, and crack appearance of their crew. The situation of master is one of much responsibility, and is on all accounts respectably filled. In some of the largest craft, junior officers of the navy are found to accept this office. The Flower of Yarrow, the property of the Duke

of Buccleuch, is commanded by one of the oldest lieutenants in the service, to say nothing of others, respecting which we cannot enter into particulars.

It has been already remarked, that the shipping of the club amounts to 7250 tons. Now, a vessel of one hundred tons seldom, we believe, stands the owner in less than from five to six thousand pounds, varying, of course, from that to ten, according to the ornamental parts, the internal fittings, and other contingencies. At this rate, the shipping of the club would have cost more than three millions and a half of money: but it is impossible to speak decisively on this point; for the first cost of the yachts vary so much, and the numerous styles of *rig* are attended with expenses so widely different, that it is idle to attempt a conclusive opinion on the subject.

Among the most active members of this club we may mention the following—but we make the selection from past remembrances, and not from any invidious distinction. Lord Yarborough is well known to the world as the commodore, and his beautiful ship, the Falcon, is admired no less for her model than the fine seamanship of her "companie." Mr. Weld, of Lulworth, and his brother James, have been indefatigable in their exertions; and who has not heard of the Arrow, the Lulworth, and the Alarm, of the former, and the Paul Pry of the latter? Lord Belfast too, Lord Anglesea, Lord Darnley, Lord Vernon, the Rev. Denis George, Lord Clonbrook, Mr. Symonds, Lord Errol, Mr. Corbett, Lord Donegal, Lord Chesterfield, Mr. Brett, Lord Ilchester, Mr. Gibson, the Duke of Buccleuch, and many others whom we have not room to mention, are known to take a high personal interest in aquatics. Mr. Assheton Smith, a name so familiar at Melton Mowbray, seemed to love his yacht as much as he did the chace; and who is ignorant of the nautical achievements of Sir Godfrey Webster? Nor can I omit to mention the arduous attention, the unremitting exertions (to say nothing of his generous disposition), of a gentleman to whom the Yacht Club is deeply indebted for his assistance—Richard Stephens, Esq. the secretary. His indefatigable zeal and valuable aid on all occasions, and at all seasons, is beyond any praise.

The Northern Yacht Club is a highly interesting society, although its plan is not so extensive as that of the Royal Club. It contains about three hundred and fifty members. The documents for 1830, with which the commodore, J. E. Matthews, Esq. has favoured us, comprise ninety-two in the Scottish and ninety in the Irish division, with fifty-two honorary members, in addition to ninety-three members of the Cork Yacht Club, who are also entered on the honorary lists. It had, in 1830, sixty yachts, not equal in proportion to the tonnage of the Cowes club, as smaller vessels are admitted. Many R. Y. C. men are found in the Northern Club; among others, the Marquis of Donegal, Earl Belfast, the Duke of Portland, the Rev. Denis George, and Captain Kean. The commodore of the Irish division is John E. Matthews, Esq. who hoists his flag in the Water Witch, a three-masted schooner of seventy-three tons; and the Duke of Portland, in his Clown, ketch, one hundred and fifty-six, still, we believe, presides over the Scottish division. There are many fine vessels in this club. Cutters, as usual, excel in number, but there are many *clippers* in the shape of schooners; and what is more in a "ladye's eye," their names are equally pretty and well chosen.

We have now to notice the Cork Harbour Club, one of highest descent, independently of its regatta being considered the oldest in the United Kingdom. We are deficient in particulars respecting this association; but we know that it is supported by some of the first men in Ireland, and has many handsome yachts in its fleet. The Emerald Isle is highly favoured by having two powerful clubs, equally respected and respectable; and it is pleasing to see the honourable men of the north blending the names of Scotland and Ireland under the bright emblem of friendship.

We must not omit to mention the share Dublin takes in these festivals, nor pass by in silence Plymouth, with her excellent Regatta Club and Yacht Society.

At the lowest computation, the number of vessels at present employed for pleasure in this kingdom cannot be less than from three to four hundred, ranging in bulk from ten to three hundred and fifty tons. These craft are variously distributed along our shores, carrying their opulence into every port and harbour in the sister islands. But there is another advantage arising from yacht clubs, which as yet has been slightly touched upon; I mean, that national principle which to a maritime people is above all choice. The bulwarks of England are her wooden walls; and if our ships are hearts of oak, let it not be forgotten that "hearts of oak are our men" also; and we must never allow the proud feeling of naval supremacy to wither or decay. The yacht clubs, by keeping alive this feeling, feed the flame of patriotism, and uphold, with just ambition, our hopes, our honour, and our fame.

Sailing regulations of the Royal Yacht Club.—First—Members entering their yachts must send the names of them to the Secretary one week previous to the day of sailing, and pay two guineas entrance at the same time.

Second—All vessels starting or entering must be the *bonâ fide* property of Members, as well as spars, sails, boats, &c. &c.

Third—Each Member to be allowed to enter one vessel only for all prizes given by the Club.

Fourth—Cutters to carry four sails only, viz. mainsail, foresail, jib, and gaff-topsail:—yawls, luggers, schooners, and all other vessels in like proportion. No booming out allowed.

Fifth—No trimming with ballast, or shifting of ballast allowed; and all vessels to keep their platform down, and bulk-heads standing.

Sixth—That vessels on the larboard tack must invariably give way for those on the starboard tack; and in all cases where a doubt of the possibility of the vessel's on the larboard tack weathering the one on the starboard tack shall exist, the vessel on the larboard tack shall give way; or if the other vessel keep her course and run in to her, the owner of the vessel on the larboard tack shall be compelled to pay all damages, and forfeit his claim to the prize.

Seventh—Vessels running on shore shall be allowed to use their own anchors and boats actually on board to get them off, afterwards weighing anchor and hoisting the boat in; but upon receiving assistance from any other vessel or vessels, boats, or anchors, shall forforfeit all claim to the prize.

Eighth—That nothing but the hand-line be used for sounding.

Ninth—That any deviation from these rules shall subject the aggressor to forfeit all claim to the prize.

Tenth—That if any objection be made with regrad to the sailing of any other vessel in the race, such objection must be made to the stewards within one hour after the vessel making the objection shall arrive at the starting post.

Eleventh—That no vessel be allowed to take in ballast, or take out, for twenty-four hours previous to starting, and that no ballast be thrown overboard.

Twelfth—Vessels to start from moorings laid down at a cable-length distance, with their sails set; and that every vessel not exceeding one hundred tons shall carry a boat not less than ten feet long; and vessels exceeding one hundred tons, to carry a boat not less than fourteen feet long.

Thirteenth—That there shall be a member, or honorary member, on board each vessel.

Fourteenth—The time of starting may be altered by the stewards, and all disputes that may arise are to be decided by them, or such persons as they shall appoint. — *Sporting Magazine.*

YARD, *s.* Enclosed ground adjoining to a house; a measure of three feet; the supports of the sails of a ship.

YARWHIP, *s.*

This species is generally rather larger than the common godwit; weight about twelves ounces; length eighteen inches; the bill is full three inches and a half long, a trifle reflected; slender; dusky towards the point; the base yellowish flesh-colour; irides hazel; the head, neck, breast, back, and the top of the head, are streaked with dusky; the back and scapulars marked with large black spots or bars; from the bill to the eye a light coloured streak; the belly and under tail-coverts white; the sides under the wings barred with dusky; the smaller coverts of the wings, on the ridge, dusky; the next inclining to ferruginous; the larger ones cinereous-brown, light at the tips; greater quill-feathers black; shafts white; the outer webs slightly edged with white half way down; inner webs white at the base; the secondary quills dusky from their points half way; base white; those next the body ferruginous, like the scapulars, barred with black; the rump and upper tail-coverts white; the two middle feathers of the tail dusky black; the rest white half way from the base; ends black; legs near four inches long, and black; the thighs bare of feathers full an inch above the knee. In some, the breast is streaked with black; others mottled rufous and white; and the upper tail-coverts barred with rufous and brown.—*Montagu.*

YAWL, *s.* A little vessel belonging to a ship for convenience of passing to and from it; a small yacht.

YEAR, *s.* Twelve months; it is often used plurally, without a plural termination; in the plural, old age.

YEARLING, *s.* Being a year old.

YELK, *s.* The yellow part of the egg.

YELL, *v.* To cry out with horror and agony; to cry like a beaten dog.

YELLOW, *a.* Being of a bright glaring colour, as gold.

To dye fine rich bright Yellows.—These are the best yellows for salmon colours, as they are very strong. The gold colours, as before directed, are better for some flies. You

are to get two pounds of strawall, and six ounces of turmeric: boil these in eight quarts of water; put down one pound of fur along with your dye stuff; give it an hour's boiling, and you have a fine shade: boil on an hour longer and draw again: boil for an hour and a half, and draw again. Finish your last with two hours' boiling, and you have four as fine high yellows as can be dyed, and fast colours.

Mr. Peter Woulfe's Recipe for the Yellow Dye.—Take half an ounce of powdered indigo, and mix it in a high glass vessel, with two ounces of strong spirit of nitre, which should be previously diluted with eight ounces of water, for preventing the indigo being set on fire by the spirit; because two ounces and a half of strong spirit of nitre will set fire to half an ounce of indigo. Let the mixture stand for a week, and then digest it in a sand heat for an hour or more, and add four ounces more of water to it; filter the solution, which will be of a fine yellow colour. If the indigo be digested twenty-four hours after the spirit of nitre is poured upon it, it will froth and boil over, but after standing about a week it has not that property. One part of the solution of indigo in the acid of nitre, mixed with four or five parts of the water, will dye silk cloth of the palest yellow colour, or of any shade to the deepest, and that by letting them boil more or less in the colour. The addition of alum is useful, as it makes the colour more lasting; according as the solution boils away, more water must be added—cochineal, Dutch litmus, orchil, cudbear, and many other colouring substances, treated in this manner, will dye silk and wool a yellow colour. The indigo which remains undissolved in making Saxon blue, and collected by filtration, if digested with spirit of nitre, dyes silk and wool of all shades of brown inclining to yellow.

Mr. Boyle tells us a most beautiful yellow may be procured, by taking good quicksilver, and three or four times its weight of oil of vitriol. Drawing off in a glass retort the saline menstruum from the metalline liquor, till there remains a dry snow-white calx at the bottom. On pouring a large quantity of fair water on this, the colour changes to an excellent light yellow.

Lighter Yellows.—Take three or four sprigs of eld, and two chips of young fustic, about the size of half a crown; boil them in six quarts of water for two hours; put down all your stuff together. You may then put in half a thimbleful of the best madder, and the same of turmeric; let them boil smartly for five minutes, and then draw a part for the first shade. It must be divided into four parts; let it boil ten minutes; lift out and draw; follow on by adding a whole thimbleful of each for the second, and one and a half thimbleful for the third, and two of each for the last. This is the only bright yellow I could get to stand, and is the best for foxes. You may dye hog's fur in this if it be very white.

Another Recipe.—Take two large handfuls of laurel leaves, nice and green, the same with ivy tops, and half a pound of weld. Put your weld in the bottom, and some of laurel branches to cover the weld, and lay your mohair nice and thin over the laurel; then cover with the ivy, and put the remainder of the laurel on the top; put on your wooden frame and your lid, and fill the pot with water, and boil it as long as you please, and you will get fine rich soft yellows. Do not boil too long at first, or omit to draw soon, as you will lose your nice golden colours, and others, for the drake's. This will not dye hog's fur, but is a fast colour.—*Ancient Recipes.*

YELLOWHAMMER, *s.* A bird.

The weight of this species is about seven drachms; length six inches; bill dusky bluish; irides hazel; the crown of the head, throat, and belly, are of a beautiful bright yellow; the back part and sides of the head tinged with green; the breast, in some, is marked with reddish-brown; quill-feathers dusky, the primores edged on their exterior webs with greenish-yellow, the secondaries with rusty-brown, those next the body, the greater coverts, and back, dusky, deeply margined with the same, the latter dashed with green; the rump and upper tail-coverts tawny-red; the tail a little forked, dusky, edged with greenish-yellow; the two outer feathers marked with white on the exterior webs; legs yellow-brown.

The female has much less yellow about the head, and the colours in general less vivid. The yellow hammer is subject to some variety in plumage. We have a specimen in which the whole head and neck is of a light yellow; some of the quill-feathers and scapulars white; and the under parts and rump pale yellow. The young birds have no yellow about them when first they leave the nest.

This is one of the most common indigenous birds of this country; if it were more rare, its beauty would be less disregarded. Its song, however, is as little attractive as that of the common bunting, possessing only a repetition of the same note five or six times successively, terminating in one more lengthened and shrill. In winter they assemble in flocks, with other granivorous birds, and pick up the

scattered grain dispersed by the bountiful flail, and not by the master of the hoarded sheaves, who knows too well the value of his auriferous store. It does not breed till late in the spring. The nest is generally placed near the ground, in some low bush or hedge. It is composed of straw and various dried stalks, and lined with fine dried grass, finished with long hair.—*Montagu.*

YELLOWS, *s.* A disease in horses.

This disorder takes its name from the yellowness of the eyes and mouth; the urine is high-coloured; dung small and slimy: pulse quick and sometimes very *weak*. The horse appears exceedingly weak and languid; sometimes in such a degree that he reels when led out of the stable; he eats but little, yet is generally rather thirsty. This disease generally requires in the first place copious bleeding, being evidently of an inflammatory nature; this is denoted by the membranes of the eye appearing red instead of yellow, and by the pulse being rather *strong* as well as quick, and sometimes by the breathing being a little quickened. I have seen, however, the membranes of the eye exceedingly red, while the pulse was so feeble as to forbid bleeding; most commonly, however, it is otherwise; and, as a general practice, it is safer to bleed freely at first. Sometimes it is necessary to repeat the bleeding; this is generally the case when we are prevented, by the apparent debility of the animal, from bleeding copiously at first. When the heart and the brain are oppressed with blood there is always great stupor and debility, and generally a pulse that may lead the inexperienced to avoid bleeding; but, upon taking off a gallon of blood, the pulse, in such circumstances, will often feel stronger; and, if the blood be examined after it has become cool, it will be found rather firm, and with a thick coat of buff or size on its surface. Immediately after the bleeding throw up a clyster, and give the following ball, and six hours after the ball the following drench, and another clyster:—

BALL.

Calomel	1 drachm.
Barbadoes aloes . .	½ ounce.
Ginger	1½ drachm.
Oil of caraways . .	20 drops.

Castile soap and treacle enough to form the ball.

DRENCH.—ONE DOSE.

Epsom salt	6 ounces.
Carbonate of soda . .	2 drachms.
Warm water	1 pint.
Castor oil	4 ounces.—Mix.

After the operation of these medicines the horse is generally so far relieved that nothing more is necessary to perfect a recovery than an abstemious diet, consisting chiefly of bran mashes, with a small quantity of the sweetest and best hay. When the debility is considerable a little gruel may be given; and if the purgative effect of the medicine continue longer than one day, it should be restrained by giving a little gruel made of wheat flour or arrow root. This disorder happens most frequently about September or October, especially after a hot season. The various degrees in which we meet with it depends chiefly, I believe, upon its being noticed sometimes earlier than at others. At first the symptoms are alarming; the horse appears languid and sluggish, and feeds badly; the eyes look rather dull, and upon opening the lids with the finger and thumb the yellowness before described may be observed; the inside of the lips and gums will be found also tinged with yellow. In this stage an opening ball and an abstemious diet would be sufficient generally to effect a cure; but if it be neglected in this stage, and if the horse is kept at work, and especially if he is ridden fast, or urged to any considerable exertion, the heart and lungs will be so oppressed with blood that medical skill will often be found unavailing.

* * *

Protracted cases of distemper are sometimes accompanied by a pustular eruption, which extends over the surface of the chest and belly, and peels off in scales: but this integumental determination seldom affords any relief, and such cases almost invariably terminates fatally. This state is also sometimes accompanied with an hepatic affection of a very fatal character, which has been called among sportsmen the yellow disease, from its tinging every part of the surface of the body with a yellow hue: the urine also is of a deep yellow, the consequence of some morbid translation of the inflammation to the secreting vessels of the liver. Mr. Youatt has found this state most frequent in the hound and greyhound; he also has observed it particularly where there is little catarrhal exudation from the nose, which I believe is the case, although I have also seen it accompanied by a profuse discharge.—*White—Blaine.*

YELP, *v.* To bark as a beagle hound after his prey.

YEW, *s.* A tree of tough wood.

While mention is making of the bad effects of yew-berries, it may be proper to remind the unwary, that the twigs and leaves of yew, though eaten in a very small quantity, are

certain death to horses and cows, and that in a few minutes. A horse tied to a yew hedge, or to a faggot stack of dead yew, shall be found dead before the owner can be aware that any danger is at hand: and the writer has been several times a sorrowful witness to losses of this kind among his friends: and in the island of Ely had once the mortification to see nine young steers or bullocks of his own lying dead in a heap, from browzing a little on a hedge of yew in an old garden into which they had broken in snowy weather. Even the clippings of a yew hedge have destroyed a whole dairy of cows, when thrown inadvertently into a yard. And yet sheep and turkeys, and, as park-keepers say, deer, will crop these trees with impunity.—*White's Antiquities of Selborne.*

YOUNG, *a.* Being in the first part of life, not old; ignorant, weak; it is sometimes applied to vegetable life.

Young horses, however, seldom derive that benefit from cordials and ale that older horses do, and particularly those which are accustomed to such treatment. The most effectual and the most innocent restorative is rest; for which in summer a field is the best situation: but if, during the time of rest, the horse be kept in a stable, his diet must be carefully attended to. This should be rather opening, and such as the horse appears to relish; vetches, or other green food, are perhaps the best. Good sweet bran is an excellent thing to keep the bowels cool and open, and may be rendered nutritious in almost any degree by the addition of good fresh bruised oats or malt. A small quantity of good sweet and clean oats thrown into the manger now and then will often induce a horse to feed when there is want of appetite; and a very small quantity of the sweetest hay, given occasionally, is generally eaten with great relish.

Young horses often fall off in their appetites during the time of cutting teeth. At this period there is often a soreness of the mouth, in which the mucous membrane of the stomach and bowels seems to participate. In such cases the want of appetite is generally attributed to the lampas, or a swelling or fulness in the roof of the mouth, adjoining the front teeth; because the horse is sometimes observed to mangle his hay, as it is termed; that is, he pulls it out of the rack, and after chewing it a little while, throws it out again. The common remedy, if such it may be called, is the application of a red-hot iron to the part, and burning out the prominent part or lampas; but this is never necessary. All young horses have that fulness in the roof of the mouth which is named lampas; and it never interferes with their appetite or the chewing or gathering of their food; there may, however, be some degree of tenderness about the gums at the time of teething, when soft food, such as bran mashes, should be given for a few days; and as the stomach and bowels are sometimes affected also, a little nitre may be given in the mashes, and an emollient clyster thrown up. When there is costiveness, or slimy dung, a laxative drench may be given also, composed of 4 oz. Epsom salt; 2 drachms of carbonate of soda; 1 pint of warm water; and 4 oz. of castor oil.

If the mouth appears very tender or sore, it may be washed or syringed with a lotion, composed of alum, honey, and water. Keeping a horse on new oats or new hay is often followed by some derangement of the stomach and bowels, indicated by looseness and want of appetite, and sometimes by excessive staling also, with considerable thirst and a staring coat. A change of diet is in such cases the most essential thing; but it is often necessary also to give some tonic medicine, or a warm laxative, such as three or four drachms of aloes, three drachms of soap, and a drachm or two of ginger, with a few drops of oil of caraway. Horses sometimes fall off in appetite merely from loading their bowels, or from staying in the stable idle too long. In this case an abstemious diet, principally of bran mashes or grass, and a clyster, are necessary, and if that fail a mild dose of physic should be given.—*White.*

YUNX (LINN.) *s.* Wryneck, a genus of birds thus characterised:—

Bill short, straight, conical, and depressed; the ridge rounded; mandibles of equal length, sharp, and not notched; nostrils at the sides of the base, naked and partly closed by a membrane; tongue long, worm-shaped, and armed at the point with a horny substance; feet with two toes before, and two behind, the fore ones joined at their base; tail with ten soft and flexible feathers; wings of middle length, the first quill shorter than the second, which is the longest in the wing.—*Montagu.*

ZINC, *s.* A semi-metal of a brilliant white colour, approaching to blue.

ZOOLOGY, *s.* A treatise concerning living creatures.

Zoological Description of the Horse.—The horse belongs to the *division vertebrated*, because he has a cranium or skull, and a spine or range of vertebræ proceeding from it.

The vertebrated animals, however, are very numerous. They include man, quadrupeds of all kinds, birds, fishes, and many reptiles. We look out then for some subdivision, and a very simple line of distinction is soon presented. Some of these vertebrated animals have *mammæ*, or teats, with which the females suckle their young. The human female has two, the mare two, the cow four, the bitch ten or twelve, and the sow more than twelve.

This *class* of vertebrated animals, having mammæ or teats, is called *mammalia*, and the horse belongs to the division *vertebrata*, and the class *mammalia*.

The class mammalia is still exceedingly large, and we must again subdivide it. It is stated (Library of Entertaining Knowledge, vol. i. p. 13) that "this class of quadrupeds, or mammiferous quadrupeds, admits of a division into two *Tribes*.

"1. Those whose extremities are divided into fingers or toes, scientifically called *unguiculata*, from the Latin word for *nail*; and 2, Those whose extremities are hoofed, scientifically called *ungulata*, from the Latin word for *hoof*.

"The extremities of the first are armed with claws or nails, which enable them to grasp, to climb, or to burrow. The extremities of the second tribe are employed merely to support and move the body.

The extremities of the horse are covered with a hoof, by which the body is supported, and with which he cannot grasp any thing, and therefore he belongs to the tribe ungulata, or hoofed.

But there is a great variety of hoofed animals. The elephant, the rhinoceros, the hippopotamus, the swine, the horse, the sheep, the deer, and many others, are ungulated or hoofed; they admit, however, of an easy division. Some of them masticate, or chew their food, and it is immediately received into the stomach and digested; but in others, the food, previous to digestion, undergoes a very singular process. It is returned to the mouth to be re-masticated, or chewed again. These are called ruminantia, or ruminants, from the food being returned, from one of the stomachs (for they have four) called the rumen or paunch, to be chewed again.

The ungulata that do not ruminate are somewhat improperly called pachydermata, from the thickness of their skins. The horse does not ruminate, and therefore belongs to the order pachydermata.

The pachydermata who have only one toe, belong to the family solipeda—single-footed. Therefore the horse ranks under the division vertebrata; the class mammalia—the tribe ungulata—the order pachydermata—and the family solipeda.—*The Horse.*

ZOOTOMIST, *s.* A dissector of the bodies of beasts.

ZOOTOMY, *s.* Dissection of the bodies of beasts.

APPENDIX.

Coach-horse, *s.* A horse used for coaches.

This animal has fully shared in the progress of improvement, and is as different from what he was fifty years ago as it is possible to conceive. The clumsy-barrelled, cloddy-shouldered, round-legged, black family horse, neither a coach nor a dray-horse, but something between both, as fat as an ox, and, with all his pride and prancing at first starting, not equal to more than six miles an hour, and knocking-up with one hard day's work, is no more seen; and we have, instead of him, an animal as tall, deep-chested, rising in the withers, slanting in the shoulders, flat in the legs, with even more strength, and with treble the speed.

There is a great deal of deception, however, even in the best of these improved coach-horses. They prance it nobly through the streets; and they have more work in them than the old clumsy, sluggish breed; but they have not the endurance that could be wished; and a pair of poor post-horses would, at the end of the second day, beat them hollow.

The knee-action, and high lifting of the feet, in the carriage-horse is deemed an excellence, because it adds to the grandeur of his appearance; but, as has already been stated, it is necessarily accompanied by much wear and tear of the legs and feet, and this is very soon apparent.

The principal points in the coach-horse are substance well placed, a deep and well-proportioned body, bone under the knee, and sound, open, tough feet.

The origin of the better kind of coach-horse is the Cleveland-bay, confined principally to Yorkshire and Durham, with, perhaps, Lincolnshire on one side, and Northumberland on the other, but difficult to meet with pure in either county. The Cleveland mare is crossed by a three-fourth, or thorough-bred horse of sufficient substance and height, and the produce is the coach-horse most in repute, with his arched crest and high action. From the thorough-bred of sufficient height, but not of so much substance, we obtain the four-in-hand, and superior curricle-horse.

From less height and more substance, we have the hunter and better sort of hackney; and, from the half-bred, we derive the machiner, the poster, and the common carriage-horse; indeed, Cleveland, and the Vale of Pickering, in the East Riding of Yorkshire, may be considered as the most decided breeding country in England for coach-horses, hunters, and hackneys. The coach-horse is nothing more than a tall, strong, over-sized hunter. The hackney has many of the qualities of the hunter on a small scale.

How far we are carrying supposed improvement too far, and sacrificing strength and usefulness to speed, is a question not difficult to resolve. The rage for rapid travelling is the bane of the post-master, the destruction of the horse, and a disgrace to the English character.

There is no truth so easily proved, or so painfully felt by the post-master, at least in his pocket, as that it is the pace that kills. A horse at a dead pull, or at the beginning of his pull, is enabled, by the force of his muscles, to throw a certain weight into the collar. If he walk four miles in the hour, some part of that muscular energy must be expended in the act of walking; and, consequently, the power of drawing must be proportionably diminished. If he trot eight miles in the hour, more animal power is expended in the trot, and less remains for the draught; but the draught continues the same, and, to enable him to accomplish his work, he must tax his energies to a degree that is cruel in itself, and that must speedily wear him out.

Let it be supposed—what every horse cannot accomplish—that he shall be able, by fair exertion and without distress, to throw, at a dead pull, a weight into his collar, or exert

a force equal to two hundred and sixteen pounds; or, in other words, let him be able to draw a load which requires a force of two hundred and sixteen pounds to move. Let him next walk at the rate of four miles in an hour; what force will he then be able to employ? We have taken away some to assist him in walking, and we have left him only ninety-six pounds, being not half of that which he could exert when he began his pull. He shall quicken his pace to six miles an hour—more energy must be exerted to carry him over this additional ground. How much has he remaining to apply to the weight behind him? Fifty-four pounds only. We will make the six miles an hour ten; for it seems now to be the fashion for the fast coach, and for almost every coach, and every vehicle to attempt this pace. How stands the account with the poor beast? We have left him a power equal to thirty-two pounds only to be employed for the purpose of draught.

The load which a horse can draw is about fifteen times greater than the power exerted, supposing the road to be hard and level, and the carriage to run with little friction; and the horse, which at starting, can throw into the collar a weight or force equal to two hundred and sixteen pounds, will draw a load of three thousand two hundred. Let him, however, be urged on at the rate of ten miles in the hour—deduct the power used in swiftness of pace from the sum total of that which he possesses, and what remains? not a sixth part—not that which is equal to a quarter of a ton—or, if it be a stage-coach, the energy exerted in draught by the four horses will not be equal to a ton.

The coach, and its passengers and its luggage, weigh more than this, and the whole is still drawn on, and must be so. Whence comes the power? From the over-strained exertion, the injury, the torture, the destruction of the horse. That which is true of the coach-horse, is equally true of every other. Let each reader apply it to his own animal, and act as humanity and interest dictate.

Many a horse used on our public roads is unable to throw all his natural power or weight into the collar. He is tender-footed—lame; but he is bought at little price, and he is worked on the brutal and abominable principle, that he may be "whipped sound." And so apparently he is. At first he sadly halts; but, urged by the torture of the lash, he acquires a peculiar habit of going. The faulty limb appears to keep pace with the others, but no stress or labour is thrown upon it, and he gradually contrives to make the sound limbs perform among them all the duties of the unsound one; and thus he is barbarously "whipped sound," and cruelty is undeservedly rewarded. After all, however, what has been done? Three legs are made to do that which was almost too hard a task for four. Then they must be most injuriously strained, and soon worn out, and the general power of the animal must be rapidly exhausted, and, at no great distance of time, exhaustion and death release him from his merciless persecutors.

It is said that between Glasgow and Edinburgh, a carrier in a single horse-cart, weighing about seven hundred weight, will take a load of a ton, and at the rate of twenty-two miles in a day. The Normandy carriers travel with a team of four horses, and from fourteen to twenty-two miles in a day, with a load of ninety hundred weight.

An unparalleled instance of the power of a horse when assisted by art, was shown near Croydon. The Surrey iron rail-way being completed, a wager was laid by two gentlemen, that a common horse could draw thirty-six tons for six miles along the road, and that he should draw his weight from a dead pull, as well as turn it round the occasional windings of the road. A numerous party of gentlemen assembled near Merstham to see this extraordinary triumph of art. Twelve wagons loaded with stones, each wagon weighing above three tons, were chained together, and a horse, taken promiscuously from the timber cart of Mr. Harwood, was yoked to the train. He started from the Fox public-house, near Merstham, and drew the immense chain of wagons, with apparent ease, almost to the turnpike at Croydon, a distance of six miles, in one hour and forty-one minutes, which is nearly at the rate of four miles an hour. In the course of the journey he stopped four times, to show that it was not by any advantage of descent that this power was acquired; and after each stoppage he again drew off the chain of wagons with great ease. Mr. Banks, who had wagered on the power of the horse, then desired that four more loaded wagons should be added to the cavalcade, with which the same horse set off again with undiminished pace. Still further to show the effect of the rail-way in facilitating motion, he directed the attending workmen, to the number of fifty, to mount on the wagons, and the horse proceeded without the least distress; and, in truth, there appeared to be scarcely any limitation to the power of his draught. After this trial the wagons were taken to the weighing-machine, and it appeared that the whole weight was as follows:—

	TON.	CWT.	QR.
12 Wagons first linked together	38	4	2
4 Ditto, afterwards attached .	13	2	0
Supposed weight of 50 labourers	4	0	0
	55	6	2

—*The Horse.*

Ferret, *s.* A small animal of prey.

The ferret has a longer and thinner body, a narrower head, and a sharper snout than the polecat. It has not the same sagacity in providing its subsistence, and unless taken care of and nourished in the house, it cannot even exist, at least in our climates, for those which have been lost in the burrows of rabbits have never multiplied, but most probably perished by the severity of the winter. The ferret also, like other domesticated animals, varies in colour, and is as common in hot countries as the polecat is scarce. The female is conspicuously smaller than the male; and when in season, Gesner says, she has even been known to die if her desires were not gratified. They are reared in casks or chests, where it is usual to furnish them with beds of flax. They sleep most perpetually, but no sooner are they awake than they eagerly seek for food, which consists of bran, bread, milk, &c. The females bring forth twice a year. and go six weeks with their young. Some of them eat their young almost as soon as they are brought forth, are immediately in season again, and then have three litters in the year, each of which consists of from five to nine.

This animal is by nature a mortal enemy to the rabbit. If even a dead one is presented to a young ferret, although he have never seen a rabbit before, he flies at and tears it with fury: but if it be alive, he seizes it by the nose or throat, and sucks its blood. When let into the burrows of rabbits, it is necessary to muzzle him, that he may not kill them in their holes, but only oblige them to run out, that they may be entrapped in the nets; besides, if he is suffered to go in unmuzzled, there is great danger of his being lost; for having sucked the blood of the rabbit, he will fall asleep; and smoking the hole is not always a successful expedient to bring him back, because as the burrows frequently communicate with each other, he is apt to be the more bewildered the more he is surrounded with smoke. The ferret is also made use of by boys, in searching for birds' nests in the holes of walls or trees.

Strabo says, the ferret was brought from Africa into Spain; which does not appear void of foundation, as Spain is the native climate of rabbits, and the country where formerly these animals most abounded. It is probable, therefore, that the rabbits having increased so much as to become incommodious, the ferret was introduced to diminish them, instead of encouraging the race of polecats, from which no advantage could have accrued but the death of the rabbit, whereas by the ferret some benefit is obtained by the hunter. The ferret, though easily tamed and rendered docile, is exceedingly irascible; he has always an ill smell, but more so when heated or irritated. He has lively but inflamed eyes; all his movements are quick, and is besides so strong, that he will easily master a rabbit three or four times as big as himself.—*Buffon.*

Fish, Gold and Silver, *s.*

When I happen to visit a family where gold and silver fishes are kept in a glass bowl, I am always pleased with the occurrence, because it offers me an opportunity of observing the actions and propensities of those beings with whom we can be little acquainted in their natural state. Not long since I spent a fortnight at the house of a friend where there was such a vivary, to which I paid no small attention, taking every occasion to remark what passed within its narrow limits. It was here that I first observed the manner in which fishes die. As soon as the creature sickens, the head sinks lower and lower, and it stands as it were on its head; till, getting weaker, and losing all poise, the tail turns over, and at last it floats on the surface of the water with its belly uppermost. The reason why fishes, when dead, swim in that manner is very obvious; because, when the body is no longer balanced by the fins of the belly, the broad muscular back preponderates by its own gravity, and turns the belly uppermost, as lighter from its being a cavity, and because it contains the swimming-bladders, which contribute to render it buoyant. Some that delight in gold and silver fishes have adopted a notion that they need no aliment. True it is that they will subsist for a long time without any apparent food but what they can collect from pure water frequently changed; yet they must draw some support from animalcula, and other nourishment supplied by the water; because, though they seem to eat nothing, yet the consequences of eating often drop from them. That they are best pleased with such jejune diet may easily be confuted, since if you toss them crumbs, they will seize them with great readiness, not to say greediness: however, bread should be given sparingly, lest, turning sour, it corrupt the water. They will also feed on the water-plant called duck's meat (*Lemna*), and also on small fry.

When they want to move a little they gently protrude themselves with their *pinnæ pectorales;* but it is with their strong muscular tails only that they and all fishes shoot along with such inconceivable rapidity. It has been said that the eyes of fishes are immovable: but these apparently turn them

forward or backward in their sockets as their occasions require. They take little notice of a lighted candle, though applied close to their heads, but flounce and seem much frightened by a sudden stroke of the hand against the support whereon the bowl is hung; especially when they have been motionless, and are perhaps asleep. As fishes have no eyelids, it is not easy to discern when they are sleeping or not, because their eyes are always open.

Nothing can be more amusing than a glass bowl containing such fishes: the double refractions of the glass and water represent them, when moving, in a shifting and changeable variety of dimensions, shades, and colours, while the two mediums, assisted by the concavo-convex shape of the vessel, magnify and distort them vastly; not to mention that the introduction of another element and its inhabitants into our parlours engages the fancy in a very agreeable manner.

Gold and silver fishes, though originally natives of China and Japan, yet are become so well reconciled to our climate as to thrive and multiply very fast in our ponds and stews. Linnæus ranks this species of fish under the genus of *Cyprinus*, or carp, and calls it *Cyprinus auratus.—White's Selborne.*

QUITTER, *s.* A disease in horses.

This is a disease of the foot, originating in a bruise or tread upon the coronet, or thin parts of the hoof. Superficial injuries on the coronet are often inflicted by the horse scratching himself with the opposite heel. But the bruise which causes quitter is of a more serious nature, and is inflicted by the horse stepping with great force upon the higher part of the inside of the foot, in endeavouring to save himself from slipping; and from this it is that the disorder generally or almost always takes place in winter, when the roads are slippery. It is well known that smiths, and the most ignorant of farriers, often succeed in their treatment of this disorder, and that veterinary surgeons often fail. The cause is, that they are not sufficiently attentive to such cases, and do not follow up the dressing as it is necessary to do, in order to get at the bottom of the injury. In order to cure a quitter effectually, let the following directions be carefully attended to.

Ascertain carefully, by means of a probe, the direction and extent of the sinuses, or pipes, as they are termed, then let them be completely filled with sublimate.

To do this effectually, the sublimate must be wrapped up in small pieces of whitey-brown paper, and introduced by very small portions at a time, so that they may be forced, as near as possible, to the bottom of the sinus. But however carefully this may be done, the sinuses are always so crooked or winding, that the first dressing can seldom be got to the bottom of them. In six or seven days a large slough or core will come out, when the dressing has been properly applied; and as soon as this has taken place, it may be necessary to dress in the same manner as at first; and even this must be repeated if the bottom of the disease is not found, and that generally is the lateral cartilage. Nothing more is necessary after this than to keep the sinus filled with lint, dipped in friar's balsam, taking care to introduce it quite to the bottom every time of dressing. The sinus will thus be gradually filled up and healed. Quitters are sometimes cured by syringing the part, after it has been cored out, with sublimate. For this purpose a tube is forced into the wound, so as to reach the bottom, and through it a strong solution of blue vitriol, or tincture of myrrh, is injected. When these means fail, the foul cartilage, or bone, may be scraped by a very small chisel or gouge, or other more convenient instrument. I have seen quitters cured, or rather dried up, merely by dressing with tincture of myrrh, after coring it out with sublimate. The opening has often remained, and appeared to have become horny within, so that no inconvenience was felt from it. Another method of curing quitter is one commonly practised by farriers or shoeing smiths, and is called boring. This is done by passing a red-hot iron, of a suitable size and form, to the bottom of the sinus, and then filling it with sublimate, or strong sublimate ointment. Sometimes another opening is made through the sound parts, at a little distance from the quitter, but in a slanting direction, so as to communicate with the quitter: this also is filled with sublimate ointment.

When much pain and swelling take place after the operation, the foot may be wrapped in a large poultice. After the cure of a bad quitter there is often a permanent defect on that side of the hoof, which is named a false quarter; that is, the new shoot of horn that grows down is imperfect, depressed, of a light colour, and is apt to split, and become a sand crack. When a horse receives a wound or bruise on the foot or coronet, by treading upon it, or by other means, the most likely method of preventing a quitter is to bathe the wound or bruise with a strong stimulant, such as tincture of myrrh, friar's balsam, spirit of turpentine, or camphorated spirit. This seems to deaden the sensibility of the bruised or wounded nerves, and thereby prevent inflammation more effectually than a poultice. Should inflammation take place, however, afterwards, a poultice should be applied.—*White.*

Race, Doncaster, for the Great St. Leger Stakes, 1832, of which our Frontispiece, drawn by Pollard, expressly for this work, is a correct representation.

The following is the account given in the Sporting Magazine for that year:—

And now the hour arrived to set all fancies and opinions at nought, and disclose what so many had so long and anxiously looked forward to ascertain. On clearing the ground, the following seventeen showed themselves, parading before the stand, to exhibit their varied beauties and accomplishments before the bouquet of female elegance and beauty which shone studded in brilliancy amidst an animated multitude:—

Lord Sligo's ch. c. Daxon, by Langar—Cora	A. Pavis.
Sir R. Bulkeley's b. c. Birdcatcher, by St. Patrick	Calloway.
Mr. Houldsworth's b. c. David, by Catton	S. Darling.
Mr. Edmundson's ch. c. Richmond, by Jack Spigot	R. Johnson.
Mr. Powlett's gr. f. by Figaro	J. Holmes.
Lord Cleveland's ch. c. Trustee, by Catton	J. Day.
Mr. Ridsdale's b. c. Brother to Maria, by Whisker	Scott.
Lord Kelburne's b. c. Retainer, by Jerry	G. Nelson.
Mr. F. Richardson's b. c. Fang, by Langar	Connolly.
Mr. S. Fox's br. c. Julius, by Jerry	S. Templeman.
Lord Exeter's b. c. Byzantium, by Sultan	Arnull.
Mr. Skipsey's b. c. Physician, by Brutandorf	H. Edwards.
Mr. W. Scott's b. c. Carlton, by Catton	Garbutt.
Mr. Watt's b. f. Nitocris, by Whisker	T. Nicholson.
Lord Langford's b. c. Roué, by Starch	T. Lye.
Mr. Beardsworth's br. c. Ludlow, by Filho da Puta	Wright.
Mr. Gully's ch. c. Margrave, by Muley	J. Robinson.

After the usual parading, the whole drew up together, and made a false start—Ludlow, Physician, and Carlton staying behind, and all the others going some distance before they could be pulled up. On re-assembling, a most excellent and beautiful start was effected, the lot going away in a cluster, with Mr. Powlett's filly leading for about two hundred yards, when Roué took it from her—Carlton, the filly, Physician, Nitocris, Birdcatcher, Richmond, Trustee, Maria, Retainer, Julius, and Fang following alongside in front, and the others well up, at one of the worst Leger paces ever witnessed, and all keeping their ground over the hill to the T. Y. C. post, when Mr. Pavis began to handle the whipcord to Daxon, who was the first that exhibited defeat. The example, however, was soon found to have plenty of imitators; for, before reaching the Red House, Fang, Nitocris, Trustee, Carlton, Roué, and Brother to Maria, fell away from the contest—Mr. Powlett's mare coming round the corner down to the rails with a very promising and flattering appearance, followed closely by Birdcatcher, Physician, Retainer, and Richmond; Margrave lying two or three lengths in the rear. On reaching the rails Calloway came out with Birdcatcher, went up to the Figaro filly, at the distance defeated her, and looked very much like a winner; but Robinson, who had patiently waited, now crept up on the outside, making his ground by a gradual steady advance. At the stand he *caught* the Birdcatcher, and left him at the post in the rear by three-quarters of a length, amid the deafening shouts of the lads "wot had put the siller on the back of Muley's son." The Figaro filly ran in third, Physician (only beat by the filly a head) fourth, Richmond fifth, Retainer sixth, and David seventh—Ludlow, Fang, Byzantium, and Carlton landing the four *last* horses of the race.

Safety Trigger, *s.*

Safety-triggers have been introduced to obviate, if possible, the fatal accidents which have arisen from accidental discharges. Many plans have been devised to effect this most desirable object. Among the most ingenious, one by Goulding, and another by Moore, are among the most novel, and probably the most effective. People must, however, be miserably nervous, to render safety-triggers necessary.

Stable, *s.* A place for horses.

Loftiness is very desirable in a stable. It should never be less than twelve feet high, and the best method of ventilation is by means of a chimney or square opening in the ceiling, communicating with the open air, or it may be made in the form of a dome or

cupola, which would be more ornamental. The chimney need not be opened at the top so as to admit the rain, but should be roofed, and have lateral openings by means of weather-boards, as they are termed. As to the admission of air into the stable, the usual means provided for that purpose are quite sufficient; that is, by windows. The method adopted in barrack stables, of making an opening in the wall, near the ground at the end of the stable, is useless, to say the best of it. A stable, when properly paved, and kept moderately clean, requires only a shallow, wide gutter, twelve inches wide, and one inch deep. This, with a pail or two of water thrown upon the floor, and swept off while the horse is at exercise, will keep the stable perfectly clean and free from offensive smells. The depth of a stable should not be less than eighteen feet, nor the height, as I observed before, less than twelve. The width of a stall should not be less than six feet clear. But, when there is sufficient room, it is a much better plan to allow each horse a space of ten or twelve feet, where he may be loose and exercise himself a little. This will be an effectual means of avoiding swollen heels, and a great relief to horses that are worked hard. With respect to the rack and manger, I shall describe one which I have seen employed in a wagon-stable with the best effect. It is intended for two horses; for horses, when a little accustomed to each other, and working together, will always agree well when kept in the same stall, especially when they have, as is the case here, separate mangers, and are prevented by their halters from interfering with each other's corn. The space for two horses is twelve feet. The mangers and rack are all on a level, and about three feet from the ground. The manger should never be less than eighteen inches deep, eighteen inches from the front to the back part, and two feet in length. The rack should be four feet for one horse. The rack may be made with staves in the front, like a common rack, but this is not necessary; indeed, it is better to have it closed in front. The back part of the rack should be an inclined plane made of wood; should be gradually sloped towards the front; and should terminate about two feet down. Such a rack will hold more hay than ever ought to be put before one horse. The advantages of this rack are numerous. In the first place the hay is easily put into it, and renders a hay-loft over the stable unnecessary; and this may be an inducement to the builder to make the stable as lofty as it ought to be, and render other ventilation unnecessary. All the hay that is put into this manger will be eaten; but in the common rack it is well known that a large portion of the hay is often pulled down upon the litter and trodden upon, whereby a considerable quantity is often wasted. It prevents the hayseeds or dust from falling upon the horse, or into his eyes; and, what is of considerable importance, though seldom attended to, there will be an inducement to the groom to give the horse hay in small quantities at a time, and frequently, from the little trouble which attends putting it into the rack. The saving in hay that may be effected by the use of this rack is so apparent that it need not be dwelt upon. Some mischievous horses will throw out the hay with their noses: but this may be effectually prevented by one or two cross bars—that is, crossing the upper part of the crib from the back to the front. This kind of rack and manger, from being boarded up in front, will effectually prevent the litter from being kept constantly under the horse's head and eyes, by which he is compelled to breathe the vapours which arise from it. The length of the halter should be only four feet from the headstall to the ring through which it passes: this will admit of his lying down with ease, and that is all which is required. The ring should be placed close to that side where the manger is, and not in the centre of the stall. The sides of the stall should be sufficiently high and deep, to prevent horses from biting and kicking each other. In post and wagon stables, where the stall is made for a pair of horses, the manger will be placed at each end, and the hay-crib in the centre. The window of the stable should be at the south-east end, and the door at the opposite end. The window should be as high as the ceiling will admit of, and in size proportioned to that of the stable. In one of twelve feet high, it need not come down more than five feet, and will then be seven feet from the ground, and out of the way of being broken. The frame of the window should be moveable upon a pivot in the centre, and opened by means of a cord running over a pulley in the ceiling, and fastened by means of another cord. With a window of this kind, in a stable of three or four horses, no other ventilation will be required: a person never need be solicitous about finding openings for the air to enter when there is sufficient room above, and means for it to escape. It is a good plan to have two doors, or to have the common door divided transversely, about four or five feet from the ground; the upper part may then be occasionally left open. Where much light is admitted, the walls of the stable should not be white, but of a stucco or lead colour, and better if painted; for then they may always be washed clean with soap and water, as well as the stalls, rack, and manger; and this should be done once in two or three weeks, or a month at furthest. If

the walls are boarded up to the height of about five feet, and this, as well as the stalls, painted of a light wainscot colour, it will look extremely neat, and the under part of the wall will be kept drier, and look more comfortable. A stable should be lighted by means of an argand lamp suspended from the ceiling, and moveable. This will give a far better light, is cheaper, and more secure than any other contrivance whatever, except gas-light, and, if properly trimmed, will burn without a particle of smoke. Instead of having a large corn chest in the stable, a handsome seat may be made at the back of the stable extending as far as may be necessary: in this there may be partitions to separate the beans, or the bran, and places may be made to rest the arms upon, so that a gentleman may sit down comfortably in his stable and see his horses taken care of. A stable thus constructed will be found conducive to the health and the comfort of horses, and will afford an inducement to the groom to attend to every little circumstance which may contribute to cleanliness. He will not allow the smallest bit of dung to remain swept up at one end of the stable, as it commonly is. The pails should be kept outside, and not standing about the stable, as they commonly are. If it is necessary to take off the chill from water, it is much better and more easily done, by the addition of a little hot water, than by suffering it to stand in the stable; and while the horses are at exercise, the litter should be all turned out to dry, and the floor well washed or swept out. A little fresh straw may then be placed for the horses to stale upon. Litter thus dried during the day will serve again as well as fresh straw for the bottom of the bed, and be free from smell. A saving may be made in litter by turning it out, and drying it as I have described; and if a shed were built adjoining a stable, it may be done at all times, and may serve also to exercise and clean a horse in wet weather.

Neither dogs, fowls, nor goats, should ever be permitted to enter a stable; and dung should be kept at a distance from it. In speaking of the arrangements of the stable, it may not be amiss to notice what I consider a good contrivance in cleaning horses, that is, to have two straps, one on each side the stall, about one yard from the head of it. By these the horse may be fastened during the time he is cleaned, by which means he will be effectually prevented from biting the manger or the groom; and being kept back in the stall, the groom will be better able to clean the front of his fore legs, chest, and neck, and be able to move round him: this is better than strapping him to the rack. When the common rack and manger are preferred, the rack staves should be straight, and brought nearly down to the manger, and this may easily be done without the necessity of a hay loft, and the manger may be made deep and wide as I have described it.

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The heat of a stable should be graduated by a thermometer, always kept there for the purpose. Our feelings are but a feeble guide to our judgment in measuring temperature. It would be well that the stable heat should seldom reach, but never exceed, 50 degrees of Fahrenheit in winter, or 65 in summer. To renew the air, the stable should be well ventilated; and such ventilation should be as near the ceiling or top of the stable as possible, as the impure air ascends. The ventilators, sometimes seen, which revolve quickly on their own centres, are not, I think, good, because they occasion a draught of air; for which reason likewise windows should be so constructed as not to open directly on either the front or the rear of the horse. One of the best methods of ventilation is by means of one or more tubes or funnels, according to the size of the stable, which should be let into the ceiling, presenting below a larger end of twelve or eighteen inches square, which, as it ascends, should narrow at its summit to about four or five inches; and this should pass out at the roof of the building, having a raised cup over its top to prevent the wet from descending. Light appears essentially necessary to a stable; the exit from a dark one must be a painful stimulus to the eyes of the horse, and his imperfect vision makes him startlish and irritable. Dark stables are supposed to encourage feeding; and it is not impossible but the horses of eastern countries eat most during the night. It also, it is thought, induces them to lie down more. The greatest encouragement to the latter is a loose box, and to the former air, exercise, and soft water. Stables should be well ceiled, and that very closely: when this is not the case, not only does the dust from the hayloft fall on the horse, but it frequently enters his eyes; and the impure air, composed of nitrogen and ammoniacal gas, which always ascends, lodges in the hay above. In fact, it would be better that both the hay and corn should be altogether removed from the sphere of action of the ammoniacal effluvia of the stable, and only brought to the animals as they are wanted. Partial draughts of air in a stable should be carefully avoided, as extremely injurious to horses: a very lofty ceiling without an upper story, is the best preventive to this. Narrow stalls are very prejudicial to horses; strains in the back are often occasioned by them; and whenever a stall is less than six feet wide, the groom should have peremptory orders never to turn the horse out of it, but always to back. Bars or bails are also objectionable, from the ease with which

horses may play with and kick each other over them, and likewise because it is seldom that horses eat alike in point of quickness; and thus, when they are separated by bars only, the slowest eater gets robbed of his food.

The acclivity of the generality of stalls is also a very serious objection to them, for they occasion a horse to stand unequally, and an undue proportion of weight is thrown on the hinder extremities: the declivity also puts the flexor tendons of both the hind and fore legs on a continual streteh, and by it probably many horses are injured. The smallest possible slope only should be allowed: neither is the central grating a remedy for this inconvenience; for it not only is useless as regards mares, but it is rather injurious, because it retains the urine, which thus continues to diffuse at every moment the effluvia it should be so much our study to avoid. It is much better that each stall should be furnished with a grating placed over a small drain at the foot of the stall, which should be so constructed, as to carry off the urine or washings from each horse into one common out-door cesspool perfectly secured against the access of the external air, that an injurious effluvia may not pass up through the gratings. Professor Peal, in his excellent *Observations*, has entered largely into the injurious effects of the ammoniacal exhalations arising from the urine: to these he attributes, in a great measure, the ophthalmia by which so many valuable horses are ruined. This separation of volatile alkali is not confined to the urinary secretion alone—it extends to the fæces also, and to both the sensible, and to the insensible perspiration. The urine, from the experiments of that able chemist, Dr. Egan, begins to separate ammonia in a few hours after its evacuation from the body, and there is reason to suppose that the fæces as readily fall into this early decomposition; therefore a necessity exists for their speedy removal also.

There is mueh contrariety of opinion relative to the propriety of permitting horses to stand during the day on litter; and there are cogent arguments for and against it. Litter entices horses to lie down during the day, which relieves fatigue, and is favourable to the recovery of over-strained limbs: it also prevents an uneven or hurtful pressure on the feet when it is cobble-paved. On the other hand, gross feeding horses are apt to eat their litter, which is not desirable. It is, likewise, too apt to retain the urine, and thereby to generate the acrid salts we have described. Constantly standing on straw makes many horses' legs swell, which is proved by removing it, when such legs immediately return to their proper size: the warmth and moisture retained in it, likewise, are very apt to occasion cracks and swelled legs. Litter retained is probably injurious to the feet also; for if horn has a tendency to contract by the application of heat, the horn of the feet being placed so many hours within it, must be subjected to this additional stimulus to contraction. In my own stables no litter is ever suffered to remain under the fore feet during the day: on the contrary, the horses stand on the bare bricks, which in summer are watered to make them more cool. Behind, a little straw is strewed, because horses are apt to kick and break the bricks with their hinder feet, and because, when no gratings exist, or no slope is present, the litter thus placed sucks up the moisture of the urine, which would be detrimental to the hinder feet, which are more liable to thrushes than contraction.

The box is a necessary appendage to every good stable; indeed, it may, with great propriety, form a part of the stable: and I would advise that, whenever a new one be erected, so to frame it, that every standing may, by a moveable partition, be readily made into a distinct and separate box. It would be well, were in-door horses more generally accustomed to spend their leisure time in boxes than stalls: boxes are advantageous to the jaded horse, by encouraging him to lie down during the day; they are advantageous to the idle horse, by encouraging him to exercise himself. By means of boxes, the evils of long frosts to the hunter are avoided; and the unrestrained enjoyment of freedom is relished by all. A loose box wholly unconnected with the stable is also a valuable appendage to a gentleman's establishment: it may thus with impunity be the receptacle of a contagious case. The detached box should be so constructed as to be capable of being cooled to nearly the temperature of the external air, or, when necessary, to be made as warm as requisite for some cases of sickness. No projections should be allowed in its walls to hurt the hips, in cases of falling from weakness, staggers, &c. It should, also, have a grate in the centre communicating with an outer cesspool, with a general slight bearing of the flooring to the grating: into a large box of this description, every horse taken up from grass should be first put, to prevent the access of the worst colds to which horses are liable, which are those caught on the sudden remove from a cool into a heated temperature.—*White—Blaine's Outlines of the Veterinary Art.*

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